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WIRELESS (FINALLY) CONNECTS

New CIO Survey Reveals Who's Getting the ROI and How They're Getting It

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ESCAPE ARTISTS

How Lear Got Out of an Expensive Outsourcing Deal

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VENDOR MANAGEMENT

THE HIGH COST OF LITIGATION

How to Get What You Need Without Going to Court

Page 40

BY SCOTT BERINATO

Before you start a project, says U.S. Can CIO Sheleen Quish, "inject the idea that if and when you hit roadblocks, you will invest in some third-party mediation."



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VOL. 17 • NO. 8 • FEBRUARY 1, 2004

Cover Story

VENDOR MANAGEMENT | 40

You Sue, You Lose: THE HIGH COST OF LITIGATION

The rise in lawsuits over failed software projects demonstrates a truism—everyone loses in court. CIOs can avoid a legal morass by doing up-front contract work to protect their companies' interests.

By Scott Berinato

COVER PHOTO BY JEFF SCIORTINO



U.S. Can Global CIO Sheleen Quish believes in trying to mediate disputes with vendors rather than litigating them. "It's like a marriage," she says. "You go to a counselor first, not divorce court."

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CASE FILES | OUTSOURCING

Filing for Divorce | 50

Lear was able to end a costly outsourcing contract early by building a business case—and then finding the right person to talk to. *By Edward Prewitt*

BUSINESS CASES

How to Make Your Best Case | 56

As the great IT budget freeze begins to thaw, you must either sharpen your project presentation skills or be cut out of the loop. Take heart—our five rules practically guarantee business case success. *By Lauren Gibbons Paul*

WIRELESS APPLICATIONS

Wireless Finally Connects | 62

Sure there was a lot of hype when wireless broke onto the scene more than three years ago. But CIOs responding to our survey say the hype has turned into value when it comes to devices, networks and applications. *By Ben Worthen*

POINT/COUNTERPOINT |

CUSTOMER REFERENCES

Sweet Deals or Bitter Meals? | 70

Should you agree to be a poster reference in return for preferential treatment? Two CIOs take opposing sides in this ongoing debate. *By Jerry Gregoire and Robert Urwiler*

MORE ►►►



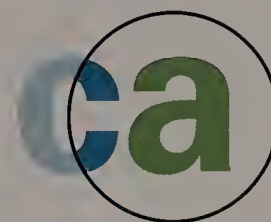
CBRE CIO **Steve Sutherland** says that today the barriers to entry into wireless—for example, price and reliability—are gone.

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Business Savvy

Columns

PEER TO PEER

The Dangers of Outsourcing (and What to Do About Them) | 30

You may have just inked a fabulous outsourcing deal. But as the CTO of the Red Cross has learned, you have to be prepared for the end game.

By David Clarke

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Taking the Measure of Vendors | 34

Many vendors claim they can help CIOs make the case for ROI. Here's how to tell the good guys from the fakers.

By Jack Keen

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By Art Jahnke

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By Gary Beach

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Can't We All Just Get Along?

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Abstracts of all the feature stories found in this issue.



“For every buyer who successfully uses vendor ROI, there are four who risk sabotaging their project justifications and their reputations.”

—Jack Keen, Real Value columnist, on the proper use of vendor ROI claims Page 34

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INTERACTIVE >features

from February 1 to February 15



Urwiler and Gregoire

ASK THE SOURCES

Customer References: Right or Wrong?

Robert Urwiler, CIO of software company Macromedia, and Jerry Gregoire, former CIO of Dell and PepsiCo, each take a different side on the debate over

the quid pro quo of customer references when technology vendors provide discounts and preferential treatment to CIOs in return for good reviews (see **Sweet Deals or Bitter Meals?** Page 70). Who's got it right? Urwiler, who maintains that such arrangements can be beneficial to all parties (as long as certain rules are followed), or Gregoire, who says there's never a good reason to exchange references for special treatment? Now you can get the inside story from one or both of them. Go to **ASK THE SOURCE** at www.cio.com/ask.

TRY THE TEMPLATE

It's All in the Presentation

As writer Lauren Gibbons Paul says in **How to Make Your Best Case** (Page 56), you'd better learn now how to sharpen your project presentation skills. Her article offers five rules for business case success. And online we offer an IT project business case sample that will help cement your next case. Go to the online version of this article for the link.



CBRE's Steve Sutherland

GET THE NUMBERS

Wireless's (Finally) Winning Way

"The barriers to [wireless] entry are gone," says CBRE CIO Steve Sutherland in **Wireless Finally Connects** (Page 62). And we've got the numbers to prove it. Every 18 months since 2000, we've pinned down IT executives on their perceptions and plans for wireless in the enterprise. To make your own comparisons over the years, or to check out where your peers are investing, see the full results of our most recent wireless survey, "The Payoffs of Wireless Technology Investments," at www2.cio.com/research.

Our Daily Web

MONDAY Tech Tact

Technology Editor Christopher Lindquist covers what's coming.



LINDQUIST

TUESDAY Quick Poll

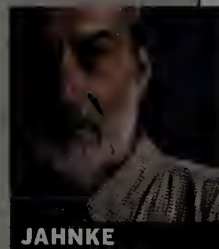
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SURMACZ

WEDNESDAY Metrics

Web Writer Jon Surmacz makes sense of the numbers.



JAHNKE

THURSDAY Sound Off

Web Editorial Director Art Jahnke opines on managerial, political and ethical dilemmas.

FRIDAY The Big Picture

Charts and graphs that are worth a thousand words.

EVERY WEEKDAY The News

We synthesize the top IT news stories of the day.

Add a Comment

» There are no winners in court (see **You Sue, You Lose: The High Cost of Litigation**, Page 40). So how do you explain the rise in lawsuits over failed software projects? What steps have you taken to avoid being duped by lawyers and the system? Share your secrets, or catch up on what your peers are doing to keep their ball from rolling into court. Go to the online version of this article and scroll to the bottom to post your comments.

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Reader Feedback

CIO ROLE MUST EVOLVE

Stephanie Overby's recommendations on how to run IT better, supplemented by behavioral cosmetics, just will not do ("The Incredible Shrinking CIO," Oct. 15, 2003).

CIO readers would be better served by understanding how the influence of the CFO has evolved from cashier, to bookkeeper, to accountant, to investment adviser, and to the current position as the fiduciary whose name appears in the filings with the Securities and Exchange Commission and reports to the investors. Always remember that the position of the most senior financial employee has very humble origins.

The lesson to be learned from the progress of the CFOs' role is that of a continued expansion in the scope of their functions. In contrast, the role of CIOs has remained largely stagnant over the past 40 years because they've focused on inserting information technologies into a reluctant corporate body. As long as CIOs continue to concentrate on IT as their primary charter, their role will keep shrinking until they get the badge as the CTO.

To grow, CIOs must seize the opportunity to manage the total cost of information (that is administrative transaction cost). In a median U.S. company, the cost

than the worth of plants and equipment plus financial assets. CIOs have an opportunity to seize the protection of all information assets as the basis for enlarging their roles. In an increasingly hostile world, we will witness global competitive contests waged for the possession of knowledge capital. The era of information-based warfare has ceased to be a purely military form and has now infused global commerce, with the United States in the position of greatest

vulnerability. Potentially the CIO is best qualified to guide such campaigns since the current accounting systems have blindsided the CFO to record only a fragment of what constitutes assets.

Paul A. Strassmann
Author and Former CIO
paul@strassmann.com

A CALL FOR I.T. UNIONS

I am writing in response to your Nov. 1, 2003, publisher's letter, "The Specter of IT Unions," in which you asked whether IT workers should unionize. All companies exist for the same purpose, to return

an increasing profit to their investors. That cannot be accomplished in the long term without cost reductions, and a significant amount of the cost of any IT organization is labor.

Naturally, this may mean the fulfillment of select job segments in lower-cost parts of the globe. However, American economic history demonstrates that as lesser-skilled positions move to low-cost regions, the workers who formerly occupied those jobs will enrich themselves and take on larger, highly skilled roles. Ultimately, this raises, not lowers, the nation's output and helps the United States remain at the top of many industries.

It's ironic you spend 143 pages on using IT departments to increase shareholder value with less people yet devote a full page to decrying the same thing.

Paul D. Thompson
paul@kineso.com

Publisher Gary Beach responds: The key issue for the United States is this: A broad-based coalition of industry, government and academic leaders must craft a long-range national technology policy addressing the key education, science and technology initiatives that America must undertake to ensure displaced workers will be able to "enrich themselves and take on larger, highly skilled roles." According to a recent CIO poll, seven in 10 IT workers support such a policy.

What Do You Think?

Send your thoughts and feedback to letters@cio.com. Letters may be edited for length or clarity. For a link to the articles mentioned, go to www.cio.com/printlinks.

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of information is now greater than the cost of goods sold and 10 times larger than the IT budget. The competitive challenge to U.S. companies nowadays is not IT efficiency but total information productivity. Applying the tools for achieving information productivity gains should become the basis for expanding the role of CIOs.

To extend their influence, CIOs must seize the opportunity to safeguard, protect and develop knowledge assets. In profitable U.S. companies, the value of knowledge capital is three times greater

All those who need to understand how to
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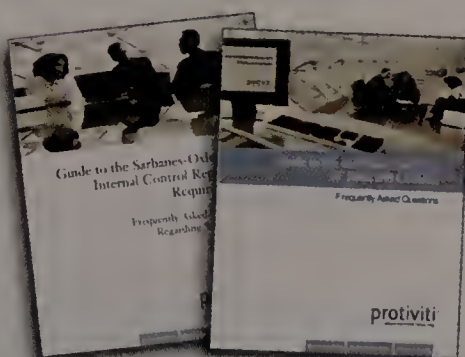
The Facts

Forward-thinking companies are considering the impact of information technology risks as they address the Sarbanes-Oxley internal control requirements. Strong IT controls benefit these companies by setting the tone for preserving the integrity of applications and data. Have you evaluated how the IT controls impact your financial reporting? What is your strategy for integrating IT risks and controls with your evaluation of internal control over financial reporting? Can you validate the operating effectiveness of key IT controls? Do you have the insight of an independent advisor?

Protiviti has developed a guide to specifically address the tough IT questions that arise when considering the role and impact of IT controls on Sarbanes-Oxley compliance.

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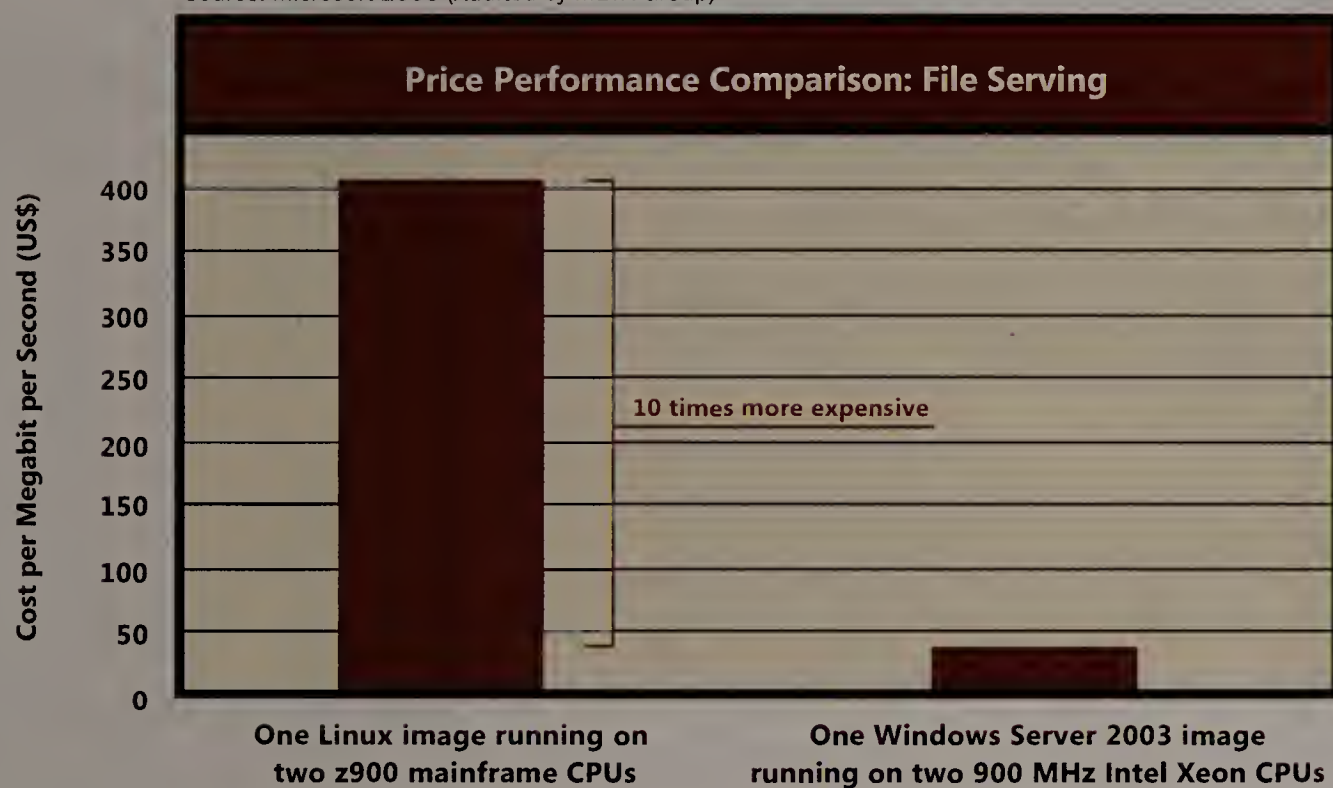
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**WEIGHING THE COST OF LINUX VS. WINDOWS?
LET'S REVIEW THE FACTS.**

Source: Microsoft 2003 (Audited by META Group)



Linux was found to be over 10 times more expensive than Windows Server™ 2003 in a recent study. The study, audited by leading independent research analyst META Group, measured costs of Linux running on IBM's z900 mainframe for Windows-comparable functions of file serving and Web serving. The results showed that IBM z900 mainframe running Linux is much less capable and vastly more expensive than Windows Server 2003 as a platform for server consolidation. To get the full study and other third-party findings, visit microsoft.com/getthefacts

trendlines

the **NEW** the **HOT** the **UNEXPECTED**

Edited by Michael Goldberg

I. T. L I T I G A T I O N

Courts Make Users Liable for Security Glitches

IT USED TO BE THAT the rules of the game made suing a vendor for a security breach a losing proposition. It was easier to settle a dispute for less, or to take an insurance payout and move on.

No more. Because of changes in the insurance business and some recent court decisions, it looks like this is going to be the year to watch for computer security lawsuits.

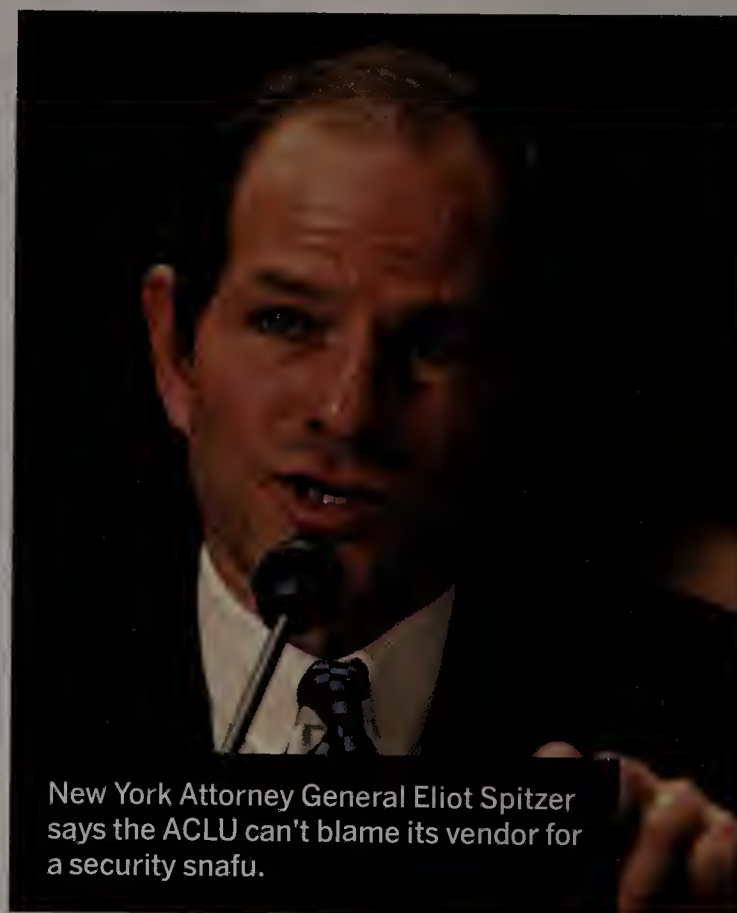
The tipping point came in October 2001. That was when, looking at huge payouts post-9/11 and no end to the super-viruses (such as I Love You and Nimda), the Hartford Insurance Co. removed computer damages from its commercial general liability plans. Other insurers followed suit. In 2002, as computer damages from major viruses intensified, agencies such as the National Institute of Standards and Technology were establishing rules and standards for software

security—and security breach victims started to view the problem as one of negligence instead of liability.

“This is really a wave-of-the-future-type trend,” notes Bill Cook, a partner at Wildman, Harrold, Allen & Dixon in Chicago. (For more about how CIOs can avoid costly litigation, see “You Sue, You Lose—The High Cost of Litigation,” Page 40.)

The decisions in this new wave of cases are sure to create new legal precedents that will go a long way to directing the security and quality of software for the future. In an essay on the topic, Cook highlights several recent cases he expects to shape future software security rulings. Here are three big ones:

■ **Worm attacks and similar misdeeds are predictable when it comes to computer sys-**



New York Attorney General Eliot Spitzer says the ACLU can't blame its vendor for a security snafu.

tems attacks. That's the reading from the *Maine Public Utilities Commission v.*

Continued on Page 20

Gender Gap

Among elite users of IT, women care less about gadgets than men. **Eight of 10 in this group use mobile phones, regardless of gender.** But men use more gadgets: 25 percent of men have a pager (compared with 16 percent of women), and 30 percent of men have a PDA (compared with 15 percent of women).

SOURCE: Pew Internet and American Life Project report, "Consumption of Information Goods and Services in the United States," Nov. 23, 2003



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OFFSHORE OUTSOURCING

India Sees IT Wages Rise

GOOD NEWS FOR INDIA'S PROGRAMMERS: more rupees all around. Workers in the Indian IT industry won the highest average salary increases in the Asia-Pacific region for 2003, according to an annual Asia-Pacific salary survey by Hewitt Associates. Wages rose 14 percent in the IT-enabled services industry.

Workers in the Philippines, South Korea and China saw pay hikes that were roughly half of that. Salaries in Singapore rose, on average, between 2.1 percent and 2.4 percent. American salaries rose 3.3 percent to 3.5 percent, the lowest growth ever reported by Hewitt.

The increases in India come as little surprise, with that country's status as the leading offshore outsourcing destination. In its 2003 annual report, Bangalore-based Wipro Technologies acknowledged that wage increases "may prevent us from sustaining this competitive advantage and may reduce our profit margins."

The pay hikes may not stem the flow of U.S. IT work offshore, but "it does motivate CIOs to examine their options," and potentially weigh the risks and rewards of contracts in other countries, says Atul Vashistha, chairman and CEO of offshore consultancy NeolT. Some already have. "India's wage inflation is one reason that companies are diversifying into Eastern Europe, China and so forth," says Dean Davison, vice president at Meta Group.

Doug F. Busch, vice president and CIO of Intel, says that companies must take a long view of outsourcing, since relative labor costs can change rapidly. "Making strategic commitments based on small cost differences is generally a mistake, since it is likely to produce high transition costs," he adds.

Vashistha expects the wage increases to continue for the next several years. What's next—an Indian labor shortage?

"Not likely," says Davison. "There are just too many people in India."

—Stephanie Overby

Court Reshapes System

Continued from Page 18

Verizon case.

After the Slammer virus a year ago, Verizon asked for a refund from the money it pays Maine's utility commission for using its infrastructure. The refund would cover the time Verizon was unexpectedly down due to Slammer, and hence not using the network. Maine pushed back, saying that since Verizon hadn't implemented the Slammer patch, and the company didn't deserve a waiver. (Maine also noted AT&T and WorldCom had no problems with Slammer.)

In April 2003, the judge sided with Maine, saying that sophisticated worm attacks are foreseeable even if you can't control them. Verizon didn't get its refund.

■ **The courts can step in to determine security procedures.** That's what a government agency learned in *Cobell v. Norton*. In this case against the Department of the Interior over unpaid benefits to American Indians, the department's computer security (and resulting website outage) became a major issue.

The judge in the case was so miffed at the Interior Department's conduct related to information security audits that he commenced contempt proceedings.

■ **You can't blame a vendor for your mistake.** That's the lesson from the contretemps between the state of New York and the American Civil Liberties Union.

When the ACLU accidentally published information about its donors (something the group had recently lambasted drugmaker Eli Lilly for doing), New York Attorney General Eliot Spitzer was ready to pounce. The ACLU, Cook says, wanted to beg off by noting its security was outsourced to a vendor. But, Cook says, that defense wasn't going to work. "It was clear that the ACLU was going to be held responsible for the failure of its vendor," he says. The sides ended up settling.

It is into this environment that a 50-year-old victim of identity theft steps in with her own lawsuit—against Microsoft. The woman is arguing that, while Microsoft claims it patches its systems, that's not good enough. The suit contends that the "eclipsing dominance in desktop software has created a global security risk," says attorney Dana Taschner, who filed the suit and wants to see Windows PC users made part of a class-action lawsuit.

"This will be a very interesting suit to follow," Cook says. "It will answer the question of whether this is a matter of public policy—whether all software vendors have a more affirmative obligation to secure their environments."

—Scott Berinato

Office manager escapes clutches of desk



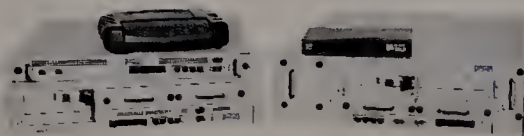
"At last I'm free, thanks to Nokia Mobile Connectivity solutions...and it feels great," exclaims Mary Langer, office manager.

"I thought I was imprisoned at my desk forever, with no hope of any release — but at last I'm free! Now I can visit more suppliers, get better prices and work whenever and however I want. Am I happy or am I happy...," Mary enthused at her first taste of freedom. Workers everywhere, from CEOs to Account Managers are rejoicing.

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Edited by Carol Zarrow

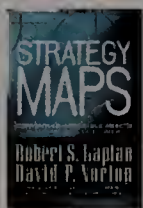
Strategy x 3

Guilt-ridden about your company's outdated—or nonexistent—strategic plan? Three recently published books may restore your confidence that your company can succeed at this vitally important task.



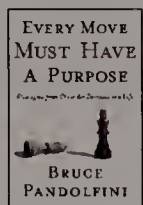
On the Fly: Executing Strategy in a Changing World

By Stephen J. Wall
John Wiley & Sons, 2004, \$29.95



Strategy Maps: Converting Intangible Assets into Tangible Outcomes

By Robert S. Kaplan and David P. Norton
Harvard Business School Press, 2004, \$35



Every Move Must Have a Purpose: Strategies from Chess for Business and Life

By Bruce Pandolfini
Hyperion, 2003, \$17.95

SO WHY EXACTLY does the topic of strategic planning raise corporate angst levels? Perhaps, as Stephen J. Wall suggests in *On the Fly*, it's because strategic planning requires confronting unpleasant realities, such as change and uncertainty.

Wall, a consultant in strategic management and leadership, argues in this engaging and well-written book that in spite of their aversion to the process of strategic planning, organizations actually need strategic focus now more than ever. Instead of the traditional plug-and-play method of strategic planning, however, companies need a “meta-strategy,” not a strategy so much as a method of doing strategy that's essentially a process of continual learning.

Key to this approach is top-to-bottom involvement, where people at all levels of the company contribute to strategic decisions. The result, Wall says, is not a static plan but an outlook for the long run that can flex and adapt to changing business conditions.

One topic that's not specifically addressed in *On the Fly* is that of technology strategy and its integration with overall corporate strategy. If interest among readers of *CIO* is any indicator, however, it's clear that the Balanced Scorecard metric developed by Robert S. Kaplan and David P. Norton covers that niche for many IT executives. The publication of *Strategy Maps* is a hat trick for the authors, with their previous books, *The Balanced Scorecard* (1996) and *The Strategy-Focused Organization* (2000).

The authors believe three components are required for a strategy to be successfully executed: its description, its measurement and its management. “Strategy maps”—visual representations of how a strategy diffuses throughout an organization—are gaining acceptance as a natural and powerful means of description, they say. One caveat, however: Readers new to the Balanced Scorecard concept should *not* start with this one, but bone up with one (or both) of the authors' earlier books.

Even older than PowerPoint slides as a “visual representation of strategy” is the game of chess. Its “strategists” are the chess masters and grand masters who over centuries developed the game's stratagems, attacks and defenses that bear their names (Alekhine's Defense, for example). In *Every Move Must Have a Purpose*, author Bruce Pandolfini (himself a chess master and coach) asserts that chess principles make

CIO Best-Seller List

The Smartest Guys in the Room: The Amazing Rise and Scandalous Fall of Enron

By Bethany McLean and Peter Elkind
Portfolio, 2003

Now, Discover Your Strengths:

By Marcus Buckingham and Donald O. Clifton
The Free Press, 2001

Execution: The Discipline of Getting Things Done

By Larry Bossidy and Ram Charan
Crown Publishing Group, 2002

Good to Great: Why Some Companies Make the Leap...and Others Don't

By Jim Collins
HarperCollins Publishers, 2001

In an Uncertain World: Tough Choices from Wall Street to Washington

By Robert Rubin and Jacob Weisberg
Random House, 2003

SOURCE: Data from December 2003, compiled by Borders Group, Ann Arbor, Mich.

excellent advice in the business world. Each chapter is devoted to one principle and concludes with a quick business analogy to drive the point home. The best advice this book offers—and it's inadvertently—is that playing chess is an excellent way to develop analytical and strategic skills. *Every Move* makes a persuasive case that the strategists of the Royal Game were and are indeed a group of geniuses, eccentrics and cutthroats who could easily go toe-to-toe on strategy with a Larry Ellison or Jack Welch.

—Carol Zarrow

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O P E N - S O U R C E S O F T W A R E

Open-Source ERP Gains Users

JORG JANKE DID NOT SET OUT to write open-source ERP software. But like many small startup application vendors, he found the traditional path to success blocked by sales and marketing costs.

"I thought open source was a model where I can make money and not have salespeople," he says. "My customers do presales and demos on their own by simply downloading the software and trying it."

Janke says he has no idea how many companies are using the software, called Compiere. But for the part of his business that keeps him afloat—paid support contracts—the response rate so far is worse than what spam gets. Of more than 600,000 downloads of Compiere, 50 customers have signed support contracts. And those contracts start at \$1,500 for 10 people per year—a pittance compared with the license fees charged by commercial ERP vendors, which charge anywhere from 10 percent to 25 percent of those fees per year for maintenance and support. Compiere works with Linux, Unix, Solaris and Windows 2000 server operating systems, and also Linux and Windows desktop systems.

But Janke professes not to care. It's 50 more customers than he would have had under the old model. After four years of sweat equity—a veteran Oracle ERP developer, the 48-year-old Connecticut-based German native wrote most of the Compiere code—he and his staff of one are making a living. Janke also gets to work at what he loves to do: write code. "Someone you've never heard of [calls and] says they like your software and wants to give you money. That's pretty good," he says.

Compiere is targeted at small and midsize companies. "If I said it was targeted at the Fortune 100, no one would believe me



Open-source ERP software has limits. But that's OK: End users can write add-ons.

anyway," he deadpans. He's right. Compiere's functionality goes from general accounting to retail-inventory management, to sales and purchase orders. But it does not have many manufacturing functions, key pieces for big companies.

Those parts are in the works—though not by Janke. He's signed up 30 small consultancies around the world to install and service Compiere, and they are working to add manufacturing functions. The partners are free to sell customized software versions, but Janke controls the release schedule and support for the core software.

Customers share the coding burden too. Jacob Pedersen, sales and logistics coordinator at Danish pharmaceutical company Pharma Nord, joined another company to write a credit card processing application in Danish for Compiere. The two compa-

nies hired a programmer in Poland and then donated \$15,000 worth of code to Compiere. Pedersen is also involved in the effort to develop manufacturing functionality. It's the only thing holding him back from installing Compiere at Pharma Nord's headquarters. He's already installed it in Pharma Nord's

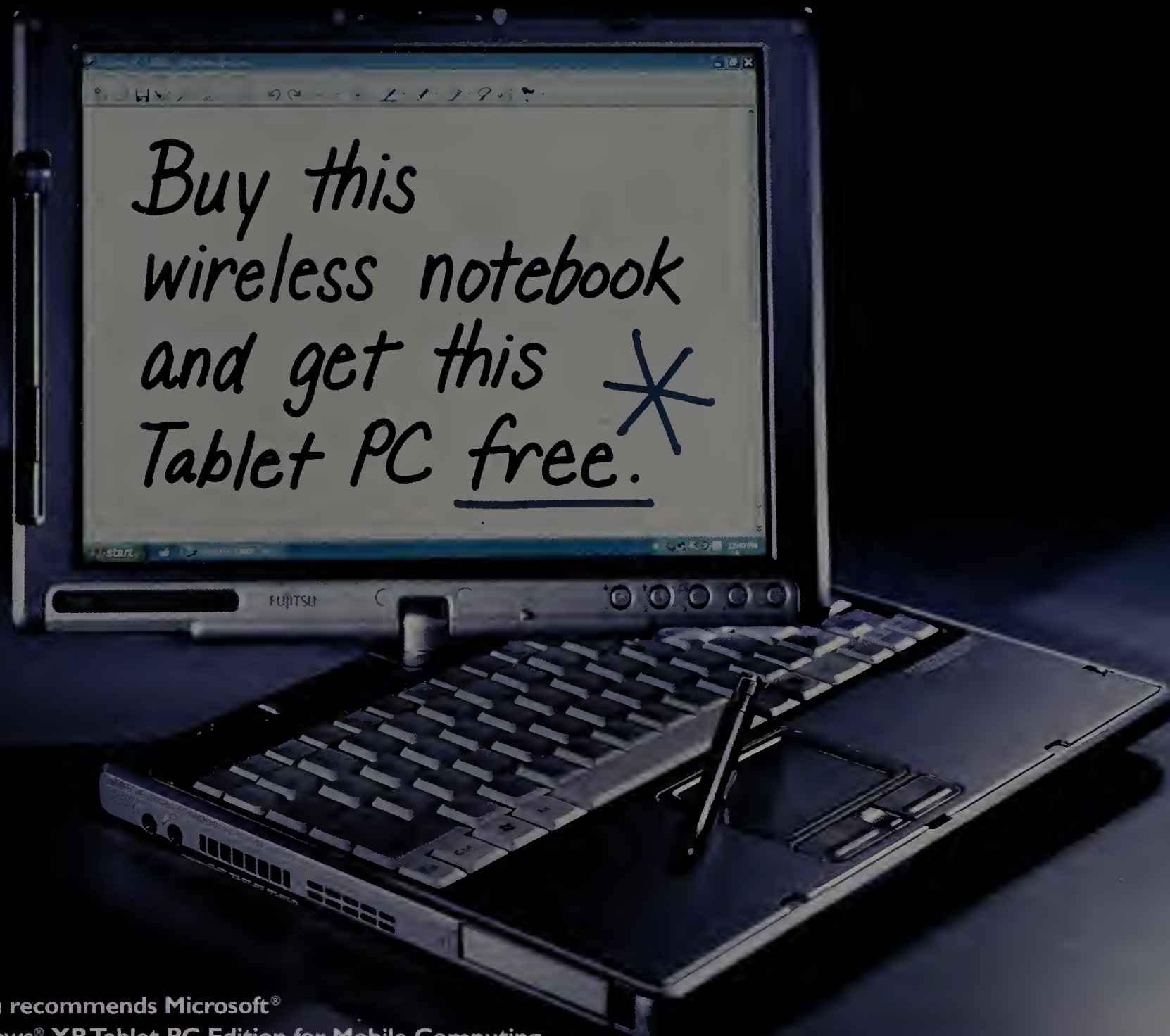
satellite sales offices in France, Spain and Holland. So far, Compiere has cost Pharma Nord about \$50,000, much less than the systems it replaced, says Pedersen.

European customers, more accepting of open source, make up about 40 percent of Compiere's customer base, says Janke.

"We don't want to be tied into a particular software vendor anymore [because] they decide to change their terms and we're locked in," says Pedersen. "Even if Compiere gets bought out or changes its terms, we can continue running it because we have the code," he says.

Besides, adds Pedersen, helping create the software you're running is fun: "We feel kind of like pioneers—in a good way."

—Christopher Koch



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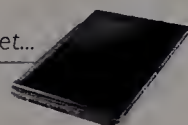
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On the Move

By Meridith Levinson

After Rest, Trainer Takes Pepsi Challenge

TO HEAR TOM TRAINER discuss the rigors he experienced as a global CIO, you'd think it was a stress factory.

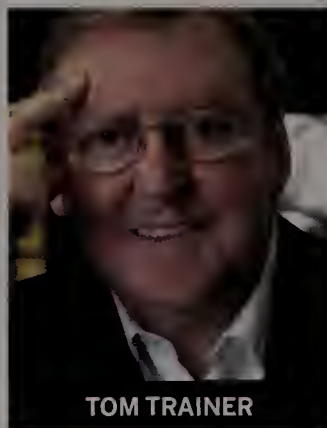
"You're like a football player who's playing fatigued all the time," Trainer says. "You're struggling with jet lag from flying three to four times each week. You're struggling to accomplish your leadership agenda. It's a difficult job. You've got to want to do it because you're tested. You're tested every single day," he says. Trainer, 57, acknowledges that he looks 10 years older because of the strain he experienced as a CIO.

With that said, you might wonder why, after a three-and-a-half-year hiatus punctuated by trips to his vacation home in Provence, France, Trainer joined PepsiCo as its senior vice president and global CIO last May. Indeed, the decision to go back to work full-time took Trainer a couple of months to reach. It turned out that early retirement was the best career move he could have made.

When Trainer left his last job, as Citigroup CIO, it wasn't entirely planned. Sure, he says, he was "ready for a break." But he left the company shortly after the retirement of his strategic ally, John Reed,

Sanford Weill's then co-CEO. He felt that his and Weill's visions of IT didn't square.

And so it was that Trainer's sabbatical gave him some time and distance from working as a CIO (though he did serve as a board member for an IT startup called Enamics). And he realized how much he enjoys the challenge of the CIO role, the mental stimulation that comes with solving business problems. This drive, along with his time walking the golf course, made him feel fit for a new opportunity.



TOM TRAINER

Meanwhile, PepsiCo was looking for a global CIO. "Pepsi realized it had some great talent in its divisional CIOs but didn't have anyone who could step up to this role," says Katie Graham, a recruiter with Heidrick & Struggles. Graham and her colleague Kelvin Thompson helped convince Trainer to take the position with Pepsi-

Co. Thompson says veterans such as Trainer are needed to fill an IT leadership void.

Trainer's reasons for taking the Pepsi challenge:

■ **He was rested and ready.** Not only did golf and rest make him feel physically better, Trainer also felt that he had bandwidth to spare.

Tom Trainer's Résumé

SINCE MAY 2003:

Senior VP and global CIO, PepsiCo

OTHER EXPERIENCE

October 2000-April 2003:

Vice chairman, Enamics

1999-2000: CIO, Citigroup

1995-1998: VP and CIO, Eli Lilly

1991-1995: VP of IS, Reebok

1989-1991: Executive VP, operations, A.C. Nielsen

1985-1989: Corporate VP of IS, Joseph E. Seagram & Sons

EDUCATION

BA, University of Strathclyde, Scotland

■ **A good match.** Trainer says his experience leading and managing organizational change enabled by IT was a good match for Pepsi's strategic goals.

■ **He saw a path to success.** Trainer was confident he could help PepsiCo.

Trainer also forced himself to consider the downside of returning to work. He wondered if he was forgetting the hard times and remembering only the excitement and gratification that comes from, as he puts it, seeing the results of one's own hard work in the achievements of others. "Ultimately, I felt I was ready," he says. "I had the energy and certainly the ability and the willingness, and I wanted to do it, so I did."

These days, Trainer runs from meeting to meeting keeping tabs on PepsiCo's IT and business transformation initiatives. (He declined to discuss PepsiCo's strategic projects.) Indeed, when CIO caught up with him by telephone, Trainer sounded short of breath. But in spite of the frantic pace, he doesn't long for a return to a retiree's open schedule.

"I find I'm reenergized by having had the time off and by realizing that I really love what I do," he says. "I don't like it every day. I don't like every situation, but I really love what I do."

NEWS OF OTHER MOVES

Two CIOs of utilities were elected to be directors of **Reflex Security**, which develops intrusion detection systems: **Becky Blalock**, senior vice president and CIO of Southern Co., and **Cecil Smith**, senior vice president and CIO of Duke Energy. In other boardroom news, **Doreen A. Wright**, senior vice president and CIO of Campbell Soup, was named to the **Yankee Candle's** board of directors. And **Randy Stone** was recently appointed to logistics software company **Yantra's** board of directors. Stone now serves as the CIO of test-equipment maker Teradyne.



Blalock

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This Date in
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SEC Says
Computerized Trading
Systems Worsened
Market Crash

Feb. 2, 1988 After the "Black Monday" stock-market crash of Oct. 19, 1987—when the Dow fell by 508 points, or 22.6 percent—everyone wanted to know why, and whom to blame. Four months later, the Securities and Exchange Commission issues a report citing computerized trading systems as having "an indirect negative effect" on the market. Of course, economic factors were front and center: Rising interest rates. A weak U.S. dollar. Plans in Congress to nix tax benefits for corporate mergers. But the SEC report notes that computer-directed strategies used by institutional investors trading large volumes of stock accounted for up to 68 percent of New York Stock Exchange trades at times during the Black Monday debacle, *The Washington Post* explained. Black Monday ended with an hour-long panic sell-off.

Among the report's proposals: Develop a new system for recording big computer-directed program trades to better monitor market conditions.

THEY SAID IT

My chief technical
CONSULTANTS are
my 15-year-old
daughter and
my WIFE. I also have
an IT person on my
SENATE staff.

—Presidential candidate
Sen. Joseph Lieberman, explaining
to CIO that he doesn't use a PDA

WIRELESS CUSTOMER SYSTEMS

Magic Wand Makes Lines Vanish



A cart-mounted computer helps consumers locate and scan goods as part of a Stop & Shop pilot project.

DAVID O'NEILL, a senior citizen who frequents his local Stop & Shop supermarket in Quincy, Mass., hasn't talked to a checkout cashier in months. And he's delighted.

"The biggest pain in the neck is the lines at the registers," O'Neill says.

Consumers are also part of a pilot project using self-service systems enabled by wireless technology to help locate goods and scan purchased items. Stop & Shop Supermarket Co., a division of Dutch retail giant Royal Ahold, began testing the applications 10 months ago in three stores south of Boston. The company, which declined to cite the amount of its investment in the pilot, is expected to decide soon whether to expand the project.

In the stores, the systems, developed by software vendor Cuesol, are straightforward. Customers select a portable computer, called Shopping Buddy, from a set of recharging racks near the shopping-cart corral and place it in a cart-mounted holder. After they use a wand to scan their Stop & Shop loyalty card (required to use the system), Shopping Buddy uses a Wi-Fi network, infrared technology and Bluetooth transmissions to help shoppers locate items, find out about goods on sale and place deli orders from anywhere in the

store. The company uses the loyalty card to record each shopper's purchases.

The Shopping Buddy user interface is a flat-panel display, about the size of this magazine page, with color images of specific goods. Using a keypad, shoppers type the name of an item, and the system tells them where it's located and how to get there.

The scanning wand lets customers log their purchases while shopping, reducing the checkout process to a data transfer from Shopping Buddy to one of the store's self-service checkouts. Stop & Shop offers a \$5 total purchase discount to first-time users, and exclusive on-sale items appear on the Shopping Buddy screen display during a trip through the store.

While saving money attracts consumers, the user interface also determines if consumers will embrace the technology, says Mark Lowenstein, an analyst at Mobile Ecosystem. "People want this technology to cut back on the time they spend shopping," he says.

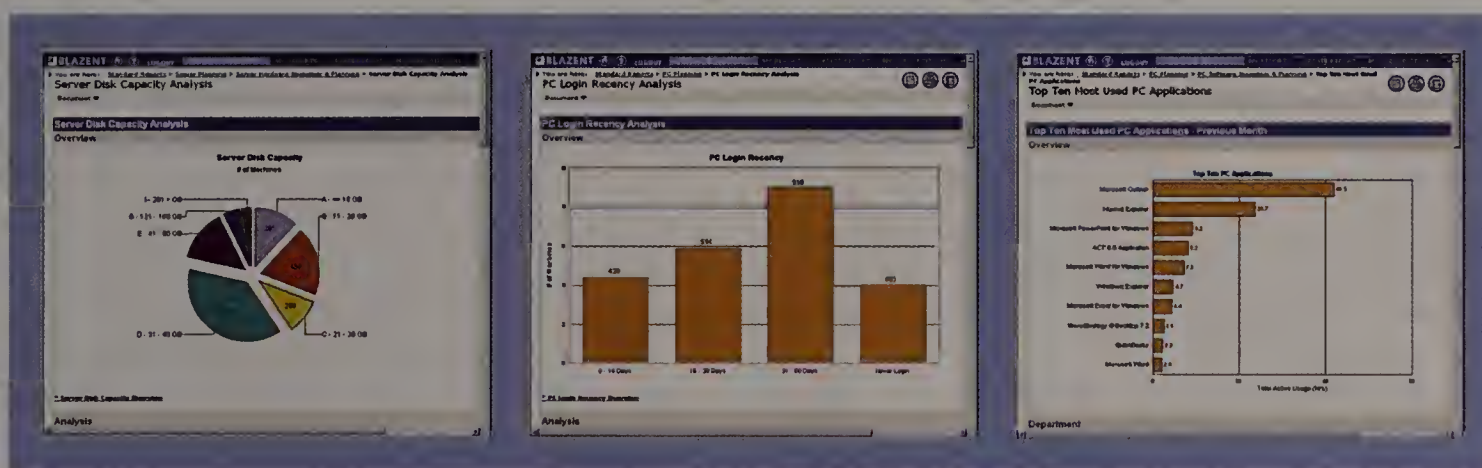
For Nina Tobin, another recent shopper in the Quincy store, the user interface wasn't a problem as she used Shopping Buddy to review her purchases. "I forgot what cereal my husband wanted," she says. "The computer can't help me with that, though."

—Fred O'Connor



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The Dangers of Outsourcing (and What to Do About Them)

You may have just inked a fabulous outsourcing deal. But as the CTO of the Red Cross has learned, you have to be prepared for the end game.

BY DAVID CLARKE

THE LAST THING most CIOs want to think about as they embark on a major outsourcing deal is what will happen when it ends. After all, reaching the decision to outsource some or all of an organization's IT services requires a great deal of business case analysis, transition planning and soul-searching about the best way to handle the many human issues involved. Assuming that the organization views the pending transaction as positive, or at least acceptable, this is a time of high excitement and tension, and it may not seem like the ideal time to plan how to get out of this arrangement in a few years. But you ignore the end game at your peril. Sourcing deals are risky, and some of the biggest risks are not visible in the rose-colored days leading up to deal consummation.

Fortunately, these risks will come to light not at the very end of the deal, but somewhere midstream, as they did a few years ago for me and my colleagues at General Motors. GM manages one of the industry's largest IT outsourcing agreements with EDS. Many factors make this arrangement unique, including the fact that it was created in 1996 when GM divested EDS with the proviso that EDS would maintain a more or less exclusive lock on GM's IT business for the next



decade. Ralph Szygenda was hired as CIO for GM's newly formed Information Systems & Services organization, and he hired a couple hundred IT executives and managers, including yours truly, to drive GM's technology strategy and manage the EDS outsourcing deal. I led three organizations in my time there, including the operations portion of GM North America's multibillion-dollar agreement with EDS, which is set to expire in 2006. In 2001 (the midpoint of the contract), we began to analyze the opportunities and risks involved in the expiration of that arrangement. While that story has yet to play out, the risks we identified are relevant to any sourcing deal, as I have since discovered in other contracts I have worked on, including here at the American Red Cross.

The first lesson from my GM days is that long-term exclusive outsourcing isolates the organization from the market. You still have widespread access, of course, to technologies and

ILLUSTRATION BY KIM ROSEN

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solutions, but you have granted one vendor the exclusive right to understand your business in depth. The more this outsourcer learns about you, the harder it will be to change your sourcing choice once the contract is up. This dynamic exists not only because this vendor understands your business well, but because others have not had the opportunity to do so. There is simply no knowledge base in the vendor community about your needs and, therefore, only limited ability to respond to downstream sourcing opportunities.

The way to mitigate this risk is to create competitive events in your sourcing arrangement. Even in its exclusive deal with EDS, GM had the ability to competitively bid some services—

be knowledgeable enough about technology to effectively manage the outsourcer. If it appears that insourcing is your best option, plan early to begin hiring the workers you will need. Finally, stay active in the technology sphere. Your participation in training and in technology decisions signals to your workers that this is important for them too.

Maintaining Leadership

The third lesson I learned at GM is that while vendors are busy running the IT services you have contracted to them, they are also busy building relationships with your business peers that they hope will lead to future business. While this is not all bad

and can lead to better execution of projects, it does pose a significant risk for the CIO. If you and your leadership team fail to engage actively with your business partners, the vendor becomes a surrogate for you or, worse yet, a rival. You may be left with no other choice at the end of the contract than to bring the vendor back in,

whether or not you want to continue with that company. Business partners may even feel that the IT function provides little value beyond managing a contract.

You can assuage this risk by maintaining close ties with key business partners and asserting your leadership over the outsourcing relationship. Make sure the vendor understands what interactions with business partners you find acceptable. Recruit your business peers to help keep the IT team clearly in charge of technology choices. My relationship with my business peers at GM was strong enough that they routinely redirected vendors to me and my team to select products and services, satisfied that their requirements would be faithfully represented. Finally, implement robust metrics that will give your company objective information about the vendor's performance and help you reinforce a proper business relationship with the vendor. This strategy should prevent any unwelcome "cozying up" to the business.

Outsourcing is a risky proposition, but one that offers potential benefits to the organization in terms of cost, service levels and access to talent. Managing an outsourcing deal well is not just a matter of negotiating effectively or implementing a strong governance model. Effective outsourcing management requires a life cycle approach that includes a robust sunset strategy. Whether you are contemplating an outsourcing arrangement or are well into one now, it's never too soon to start looking for the exit. **CIO**

David Clarke is vice president of enterprise technology services at The American National Red Cross. He can be reached at clarkedavid@usa.redcross.org.



Beware of granting one vendor the exclusive right to understand your business in depth. That will make it harder for you to walk away from the deal.

long-distance telephony and voice mail, for instance. We also rebid all of the IT services in GM's locomotive division. That gave other vendors the opportunity to learn about GM's needs. Many contracts contain provisions to rebid some services to keep pricing and terms competitive, but the chief benefit of these competitive events is to educate other vendors about your business. Keep such competition reasonably modest in scope so that it doesn't undermine your deal, but use it strategically to build competence in the vendor community.

Keep Employee Skills Au Courant

The second lesson is that the skills you need to provide IT services internally are different from those you need to govern outsourcing agreements. Just as you have to build contract and vendor management skills to govern a new deal, you may also have to bring on hordes of project managers, programmers and system administrators if you decide to bring services back inside at the end of the deal. In the meantime, any technical employees you retained while services were outsourced have likely experienced some deterioration of their skills since the vendor did most of the digging into new technology. Even if you decide to continue to outsource, you will need to recharge your employees' skills to adapt to changes in the business climate since you last wrote a deal some years ago. That requires a commitment to training internal staffers both in the skills they need to manage outsourcing arrangements and in the latest and greatest technologies. Training programs like this yield two benefits: You will have a staff that is capable of bringing the work back inside if that is the right choice, and in the meantime, your team will

A black and white photograph of a person rock climbing a steep, layered rock face. The climber is wearing a dark t-shirt, shorts, and a climbing harness, and is secured by a rope. The background shows a vast, open landscape under a clear sky.

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Taking the Measure of Vendors

Many vendors claim they can help CIOs make the case for ROI. Here's how to tell the good guys from the fakers.

A VENDOR APPEARS at your doorstep with impressive ROI claims. A golden justification opportunity or a trap for the too-trusting? Embracing vendors' cost-benefit aid is tempting in today's "prove it or lose it" environment. Unfortunately, dangers abound. The risks in using vendor input are many—so CIOs must proceed carefully. My experience indicates that for every buyer who successfully uses vendor ROI input, there are four purchasers who risk sabotaging both their project justifications and their reputations. Tolerating suppliers that are (intentionally or not) oblivious, incompetent or misleading in their ROI words and deeds is ill-advised. Here are five tips for vetting vendor ROI claims and leveraging them for your own gain.

Know Thy Enemy

1 Two types of vendors are to be avoided: those with misleading ROI claims and those that say nothing about ROI at all. Warning signs of such value-challenged vendors include feature-laden demonstrations, jargon-invested proposals, unsubstantiated claims and too much focus on the technology, rather than on business value. Be especially alert if the



vendor executives themselves appear value-adverse. When they can't talk convincingly about ROI, most likely neither can their troops. Even if their field folks can manage some occasional ROI-speak, chances are it won't be reliable. Fact is: Business-value focus reflects the culture of an organization. And a culture of pro, anti or neutral ROI talk begins at the top.

Ban Practices That Attract Bad Guys

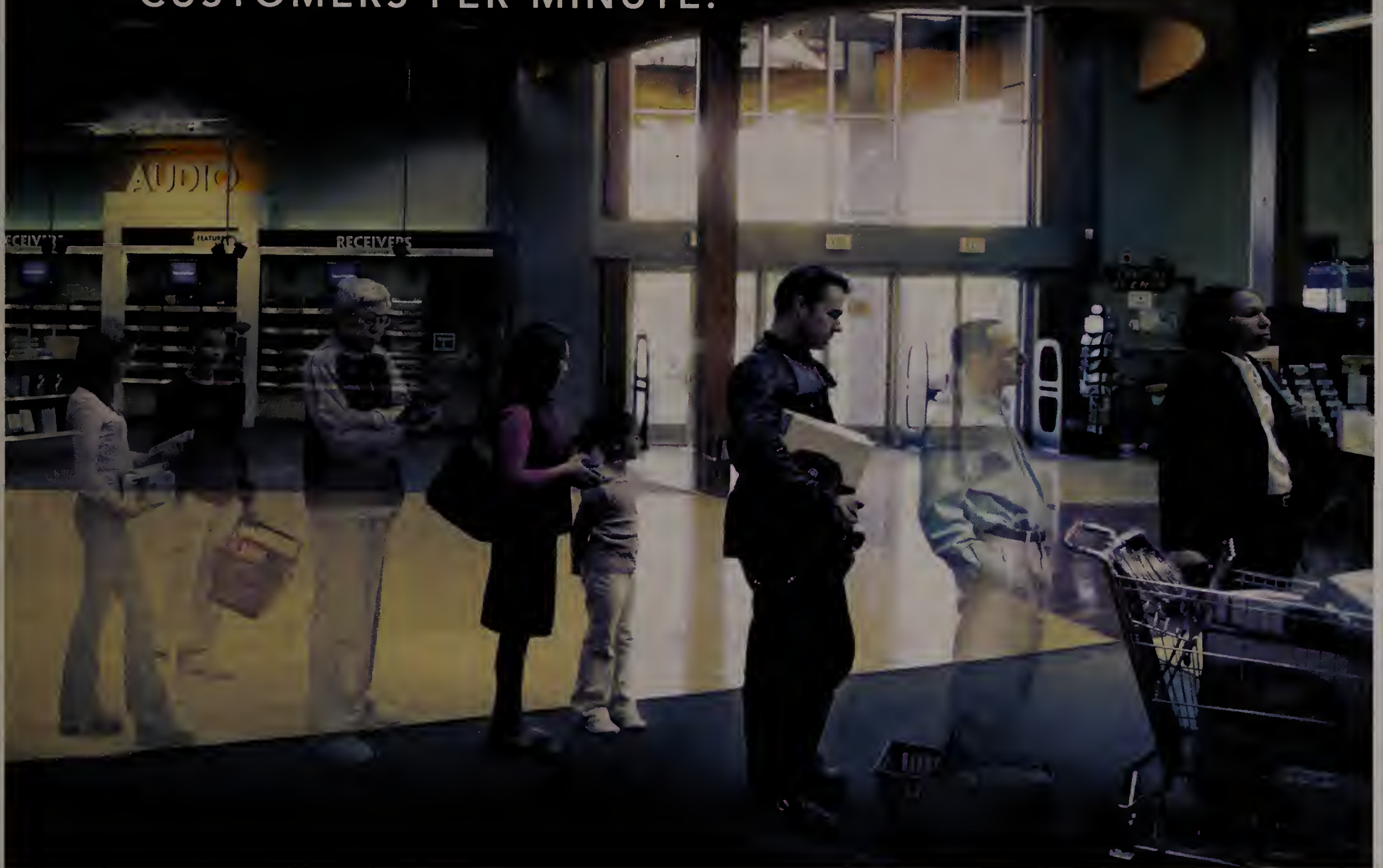
2 Too often buyers employ evaluation techniques that unintentionally open the door to ROI-weak vendors. Here are four methods to avoid:

- Feature-focused, rather than value-focused, requests for information and RFPs. If you insist on 105 whizbang features, with minor attention to business benefits, don't be surprised when ROI-challenged vendors respond with bits- and bytes-laden proposals.

ILLUSTRATION BY ANTHONY FREDA

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- Excessive conversations about features and functions. Don't let your evaluation people spend 95 percent of their vendor conversation time discussing those things. Instead, insist they spend quality time learning from the vendor, beginning early in the evaluation cycle, on what true business value is possible, where such value resides, how it can be measured, how to

For every buyer who successfully uses vendor ROI input, there are four purchasers who risk sabotaging both their project justifications and their reputations.

make it happen and who says so and why.

- Avoid using obscure and opaque decision-making criteria and methods. Such methods become a breeding ground for vendors that prefer behind-the-scenes "buddy" talk to publicly scrutinized business-value discussions. In addition, murky decision-making practices are totally out of step with today's push for more visible and trustworthy IT governance. If you have a well-understood and transparent process for making decisions internally, vendors will also be expected to conform.

- Be intolerant of FUD arguments from ROI-weak vendors. Be clear that purchases made in your shop are based on manifest value, not market dominance.

Look for Backup Data

3 Vendors with ambiguous ROI claims undermine business-case integrity since their ROI assertions appear real but aren't. A common sign of misleading value statements are claims that have no data backing them up. For example, an impressive advertisement or case study may tout that "Client A obtained a 125 percent ROI." If you see no explanations, rationale or footnotes that lead to a clear explanation, ring up a "no sale" for that vendor. By the way, hold industry analyst firms to this same standard. Just because such advisers may have an impressive client list doesn't mean any given ROI statement is a fact. If their publications don't keep this guess-versus-fact distinction crystal clear, call them on it. Always ask for specifics and any hard numbers they can give you. The best way to determine if any claim is valid is to go directly to the source to learn what the claim is based on.

Share Your Opinion

How do you vet your vendors? Go to the online version of this article, and scroll down to the **ADD A COMMENT** section to let other CIOs gain the benefit of your experience.

cio.com

Hold Vendors to a Higher Standard

4 Take the attitude that an ROI claim must be held to a four-way test of tangibility, understandability, measurability and relevance. For example, I know of one collaboration management solutions vendor that claims its client has recouped its investment cost within the first two months of implementation just from saving employees time in manually managing Web seminars. Close examination of the vendor's claim reveals that the savings are tangible, clear, measurable, link directly to the vendor's solution and are substantiated in writing by the manager directly associated with the project. If the environment upon

which such claims are based is analogous to yours, then this type of claim is eligible for confident placement in your business case.

Leverage the Good Guys

5 ROI-savvy vendors can boost the cost-effectiveness of your entire evaluation process. I overheard one CFO tell a vendor, "Had you come to us [with your ROI tools] earlier, you would have saved us six months of lost vendor and product evaluation time and effort." Another client asked a vendor to conduct an ROI discovery workshop that unearthed \$16 million in benefits, enough to get the application approved by an ROI-obsessed board of directors. Using vendors that know their ROI can provide you with faster and more comprehensive assessments, greater confidence in your recommendations, and fewer funding disappointments. When it comes to IT projects, an ounce of business-value focus is worth at least a pound of features and functions. Reward such suppliers by giving plenty of evaluation points to those who demonstrate such ROI intensity. Once you have collared an ROI-aware vendor, use it for all it's worth. Request the company's help for such activities as researching relevant benefits, getting interview data, providing business-case creation tools and supplying samples from other clients. After all, most vendors will fly multiple sales and demo support people to you at the drop of a hat. Ask them for the same level of support for your all-important business case. If they are hesitant, maybe their priorities are misplaced.

Good vendors often bear gifts of ROI help. Distinguishing the trustworthy suppliers from the fraudulent or clueless is the first crucial step toward ultimate project success. **CIO**

Jack Keen is president of IT consultancy The Deciding Factor (www.decidingfactor.com) and coauthor of *Making Technology Investments Profitable: ROI Road Map to Better Business Cases*. He can be reached at jkeen@decidingfactor.com.





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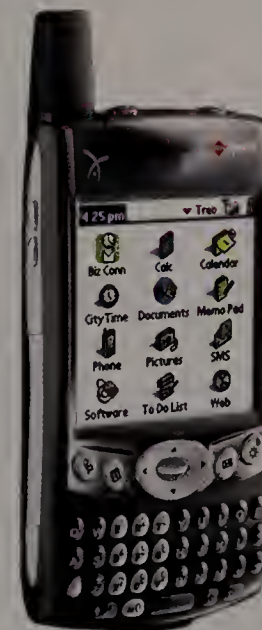
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Retreat Moderator

Peter Weill

Director, Center for
Information Systems
Research, MIT Sloan
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The Case Studies

Peter Weill once again presents new findings and case studies from work with hundreds of Global 1000 companies, focusing on three key areas: IT infrastructure for strategic agility, effective business models, and IT governance.

► IT Infrastructure for Strategic Agility

Strategic agility—the ability to implement new business initiatives quickly and cost effectively—will be an increasingly important capability for enterprises in 2004. IT infrastructure is one of the critical platforms required for strategic agility. Investing in the right infrastructure at the right time enables rapid implementation of future electronically based business initiatives and cost reduction of current business processes—i.e., more business value. This session presents a framework for senior executives to view IT infrastructure in business terms and to lead in making investment decisions. Weill illustrates how firms successfully implement and exploit their IT infrastructures with several case studies.

► Do Some Business Models Perform Better than Others?

In an increasingly connected business world the business model—what a firm does and

how they make money—is a critical strategic decision. Understanding what business models are used, how they are combined, and which are most successful

is important for every senior manager. In addition, firms implementing each model use IT differently—resulting in different IT portfolios. This presentation provides a new and powerful way to analyze a firm's business model and then think about the IT needs.

► IT Governance Workshop

In response to strong interest in last year's session on IT governance, Weill leads a workshop on how top performers govern. He presents case studies and insights from MIT CISR's study of effective IT governance in 256 enterprises in 23 countries. A framework is presented in this workshop to analyze and communicate governance, illustrated with cases studies of top performers.

► Monday's Case Study Workgroups

Monday at lunch we divide into small groups to investigate the link between business strategy and IT infrastructure in a new case study. The case is based on a global multi-business unit firm in the healthcare industry moving from a fully decentralized approach to information technology to providing some firm-wide IT infrastructure. The challenge for your group is to advise the newly appointed CIO. Groups will report back with their recommendations.

The Enterprise Value Award Winners

► Conversations with This Year's Winners

We offer breakout sessions with this year's winning organizations. It's your chance to talk at a more intimate level, discuss their particular case in more detail and take away lessons you can apply to your own organization back home.

- Academic Management Services
- Ace Hardware Corporation
- Chicago Police Department
- Continental Airlines
- Dell Computer
- Guardian Life Insurance Company of America
- Korn/Ferry International
- Pfizer Global Research & Development
- Procter & Gamble Company
- Worldspan LP

► The Value Proposition

Our panel of CIO Enterprise Value Award winners talks about the ongoing difficulty inherent in demonstrating and delivering IT value. How do you convince your CEOs, CFOs and COOs—who may think IT is just a commodity, a utility—that its intelligent application and deployment can and does indeed bring strategic value to the business.

► Monday Night's Gala Awards Ceremony & Dinner

We'll announce the winner of the Grand CIO Enterprise Value Award—and honor all the winners in the industry categories at a black-tie reception, awards ceremony and dinner.

The Peer Networking

CIOs tell us it's as important to have opportunities to meet informally with their peers as it is to participate in the Retreat sessions. We give you more opportunities to meet and learn from more of your peers over three days. And we're happy to hook you up with other attendees or corporate sponsors you'd like to meet.

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THE HIGH COST of Lawsuits, Who loses

The rise in lawsuits over failed software projects demonstrates a truism—everyone loses in court. CIOs can avoid a legal morass by doing up-front contract work to protect their companies' interests. **BY SCOTT BERINATO**

PHOTOGRAPHY BY JEFF SCIORTINO

OF LITIGATION

THE MORAL OF THIS STORY: STAY OUT OF COURT

In March 2000, a \$10 million software company called Triple Point Technology signed three contracts with Transammonia, then a \$1.5 billion petrochemical company, promising to link all 27 Transammonia offices with a state-of-the-art commodities trading platform called Tempest 2000. Triple Point also agreed to design and develop six interfaces between Tempest and Transammonia's existing PeopleSoft accounting system.

For Transammonia, it was the quintessential Internet-era "business transformation project" that would launch the old economy company into the 21st century of Internet-based, real-time, 24/7, free-flowing information. And the six interfaces between Tempest and Transammonia's existing accounting software were the crux of the deal. No point in having a free flow of information if it didn't freely flow into the general ledger.

Triple Point assured Transammonia the interfaces wouldn't be a problem. In its business proposal to Transammonia from September 1999,

Reader ROI

- ▶ Why more software projects are ending up in lawyers' hands
- ▶ The three unpleasant types of recourse for project disputes
- ▶ How a little up-front work on project contracts prevents problems later

Sheleen Quish, global CIO of U.S. Can, engaged her company's systems vendor in an offsite mediation session to head off a confrontation that could have ended up in a courtroom.

Triple Point said no fewer than three times that it had “experience” building “fully integrated solutions.” Triple Point could “custom-build any interfaces required,” the proposal also said. The sides talked about the interfaces shortly after the proposal, and a month later, too, when Triple Point again assured Transammonia that it was “very familiar with the nature of these interfaces, having built them for some of our existing clients.” Triple Point said it had built a similar Tempest-to-PeopleSoft bridge for Mico, another chemical company.

Transammonia was convinced. The company supplied a quote for Triple Point’s press release—something about working efficiently in fast-changing markets. It was a happy nuptial, but then, nuptials are never unhappy. Marriages sometimes are.

FAILURE HITS. SEND IN THE LAWYERS.

But Triple Point, it turned out, was rather liberal in representing its experience. In fact, it had never developed the interfaces. The company had only managed subcontractors that developed the interfaces, and it had done that just twice.

No one at Triple Point had mentioned subcontractors to anyone at Transammonia prior

to the contract signing in March, but that was the plan. Triple Point hired PeopleSoft to develop the interfaces.

But by August, Triple Point still hadn’t provided PeopleSoft with a project plan and failed to monitor progress on the interfaces, other than through informal conversations. By the Dec. 31, 2000, deadline, zero of six interfaces was completed. In February 2001, Triple Point stopped paying PeopleSoft. A few days after that, Transammonia stopped paying Triple Point. Finally, Triple Point turned the screws on its subcontractor, setting a firm March 9, 2001, deadline for the interfaces to be completed.

That deadline wasn’t met. Nor were March 29th, April 24th or April 30th deadlines. Transammonia officially suspended the project on May 2, 2001. Within days, Triple Point executives were pleading with Transammonia to hang in there. Triple Point wrote letters to Transammonia claiming it was the subcontractor’s fault for not devoting the talent or resources necessary to the project—despite the fact that Triple Point was so tardy providing a development plan and wasn’t checking up on its subcontractor.

The contract stated that Transammonia would get the six interfaces in 230 days at a

Futility Defined

LITIGANT *n.* A person about to give up his skin for the hope of retaining his bones.

LITIGATION *n.* A machine that you go into as a pig and come out of as a sausage.

COURT FOOL *n.* The plaintiff.

SOURCE: *The Devil’s Dictionary* by Ambrose Bierce

cost of \$375,000. But after 400 days, having been billed \$635,000, Transammonia had one interface.

So on July 11, 2001, Transammonia set a 30-day ultimatum: Make everything work or else. Triple Point could not do that. Transammonia refused to pay Triple Point any money it owed, so Triple Point sued its client for breach of contract, demanding \$795,000 for services rendered. Transammonia then countersued for breach of the agreements and demanded its money back and then some.

Thus divorce proceedings began.

They didn’t end until Sept. 25, 2003, more than two years after lawyers commenced billable hours and a full four years after Triple Point submitted its sunny business proposal.

The New York Supreme Court’s Judge Herman Cahn, in a 4,408-word decision from which the above narrative was taken, recounted the significant—that is, the ugliest—details of the affair. He ruled in favor of Transammonia. (Both companies declined to comment for this story, including Transammonia’s CIO, Benjamin Tan. PeopleSoft also declined to comment.)

But as victories go, this one lacked marrow. Transammonia will get a refund (a court-appointed special referee is still deciding the amount), but four of Transammonia’s five counterclaims were thrown out. The one claim granted called for rescission—legalese for putting things back the way they were before the parties knew each other.

Or, as the final footnote in

Dispute Resolution Pain Index

The three methods for resolving legal disputes between two parties—as in a software project that’s failed—vary by cost and the parties’ goals

	MEDIATION	ARBITRATION	LITIGATION
Time	Weeks	Months	Years
Cost	Significant	High	Extremely high
Evidence and witnesses	No	Yes	Yes
Result is binding	Rarely	Usually	Always
Level of antagonism	Low	High	Irreparable
Potential to save project	Yes	No	No
Public record	No	Rarely	Yes
Why do it?	• Save the project • Save the relationship • Resolve minor disputes	• Resolve major disputes • Stop the bleeding • Spur settlement	• Retrieve losses • Reclaim reputation • Spur settlement

SOURCE: CIO reporting

Cahn's decision noted, "Transammonia asserts that it has paid over \$1.5 million to Triple Point under the Agreements, 'and has nothing of value to show for it.'"

SAVE MILLIONS WITH A PARAGRAPH

Technology litigation—broadly defined as suing or threatening to sue over software project failures—is not new. The legal books are full of it. In one notable 1979 case, National Cash Register (NCR) was successfully sued by an electronics company called Chatlos Systems for breach of contract. Like Triple Point, NCR promised systems it didn't deliver. In 1991, service staffers for Wang Laboratories (now Getronics Wang, a branch of Dutch company Getronics), attempted to fix a deployment of computers they had just sold to a sports injury clinic, but they accidentally destroyed five years of clinical and accounting

"We're getting more and more work as honest brokers [or mediators] in cases just like this."

"There's no doubt there's a rising tide of cases."

What's different about software project disputes than other corporate lawsuits and what most shocks lawyers about this particular cottage industry is the utter avoidability of many, if not most, of the complaints. These suits are not about failure of projects so much as they are about the failure of CIOs and their executive brethren to legally prepare for failed projects.

When they fail to prepare, CIOs can expect to end up in one of three types of dramas:

Mediation is the least nasty and most likely to save the project, which it did for Sheleen Quish, vice president for marketing and global CIO of U.S. Can. "It's like a marriage," she

Pay Up

FEES FOR PLAYERS In a dispute resolution drama vary by region and each professional's experience. But the dollars can pile up fast.

Lawyers	\$300-\$600 per hour
Mediators	\$1,000-\$3,000 per day
Arbitrators	\$1,000-\$3,000 per day
Expert witnesses	\$250-\$500 per hour

SOURCES: American Association of Arbitrators, CIO reporting

because both sides would have signed a contract that accounted for what lawyers would consider easily foreseeable problems.

But contracts executed on software projects are often woefully inadequate, according to lawyers like Lee Gesmer. "I'm astounded by some of the [contracts]," says Gesmer, who is a partner at Lucash, Gesmer & Updegrave

What shocks lawyers about software project disputes is the utter avoidability of the complaints. These suits are about the failure of CIOs and other executives to legally prepare for failed projects.

data. Wang was found grossly negligent.

Like the Transammonia and Triple Point case, those cases occurred in down economies. Lawyers say litigiousness in the software project world (as in the world at large) is generally inversely proportional to the economy. And so, according to the experience of seven legal specialists interviewed for this article, the number of software disputes coinciding with the recent recession point to more IT project court battles:

"[Disputes] sprung back up aggressively in 2002, 2003."

"Our firm has seen about a 300 percent increase in cases in the last five years."

"The economy went down.... People started suing each other."

"As an arbitrator in these cases, I've seen a significant rise in disputes in the last three to four years."

says. "You go to a counselor first, not divorce court."

Arbitration is a nastier genre where witnesses and evidence are used and in which there are losers and ostensible winners.

Litigation is the very center of software project dispute hell. Phrases you can expect to hear attached to this kind of action are "years of depositions and discovery" and "millions of dollars." (See "Dispute Resolution Pain Index," opposite page.)

In any of the three cases, these are mainly contract disputes. And while anticipating disagreements is one of the primary functions of a contract, the written agreements for software projects don't seem to do that at all, says Hillard Sterling, a litigator and partner at Much, Shelist, Freed, Denenberg, Ament & Rubenstein in Chicago. In any other industry, many of these cases would never become cases

in Boston. He has also served as mediator and arbitrator in software disputes. He says he's seen contracts signed by multibillion-dollar companies that are so one-sided in the vendor's favor that "it appears the customer had no legal involvement in the contract. I walk around the office showing it to other lawyers saying, Look at this," says Gesmer.

In many cases, adding just a few words to a contract to specify who's responsible for what and when would prevent multimillion-dollar disputes (see "A Crash Course on Avoiding Software Project Disputes," Page 45). True story: "Acme," a Fortune 500, deployed a system in which response time to database queries was a joke—a minute or more with several concurrent users. Simply unusable, according to a lawyer involved in the case. Acme told the vendor to fix it; the vendor told Acme to upgrade its hardware, which would cost Acme

\$1 million. Acme felt the vendor misrepresented its systems capabilities and that the vendor should pay for the upgrade. Acme sued.

The case is pending, but who wins is beside the point. Acme could have avoided all of this if its original contract had contained a simple performance clause: one paragraph that specified acceptable query response times and what hardware the vendor would be required to supply to make them possible.

GET COMFORTABLE WITH LAWYERS IN THE ROOM

Lawyers lay much of the blame for all of this at the feet of the CIO, whom they call an “underachieving, underinvolved” participant in software project contracts. “From what I’ve seen, it’s uncommon for an executive team, including the CIO, to

have a solid game plan going into these projects,” says Sterling, who started a full-time technology litigation practice a year ago after handling such cases for five years.

The lawyers attribute this lack of planning to three factors.

One, CIOs are inexperienced with contract law and either fear demonstrating that inexperience to other executives (each project is, in large part, the CIO’s baby). Or as Gesmer says, “They’d rather delegate that to someone else.” Sterling says the IT executive’s ethic, born out of years of hustling his way into the executive circle by proving his worth, is to demonstrate accomplishment—not to avoid dispute. Being the one to prove you mitigated a potential lawsuit, he says, is difficult and often disregarded anyway.

The second factor that keeps CIOs from

playing the key role in brokering good contracts is the emotional optimism that always accompanies the so-called BTP, business transformation project. Love and romance, says Bill Bierce of Bierce & Kenerson in New York City, probably explains why a billion-dollar company such as Transammonia, which had the resources to blanket the project with due diligence, didn’t do more of it. When you’re about to get married, no one wants to be the one to bring up prenups. “The human problem is, you want to trust each other, you really do,” says Bierce.

The third factor, and the most self-serving for the lawyers, is that CIOs don’t cultivate legal experts outside of their own corporate lawyers, who themselves lack experience with software contracts. Take Charlie Talmadge’s experience as a lesson. Talmadge, the former CEO of Merchants & Businessmen’s Mutual Insurance, experienced a software dispute that eventually went through arbitration.

“I always say this now,” says Talmadge, now retired. “If we would have hired expert lawyers up front and spent \$20,000 having them argue with the software vendor as we were putting together the deal—instead of relying on our own lawyer, from Harvard, who also didn’t know anything about software—we would have never signed that contract. We would have been better off.”

WINNERS IN COURT, LOSERS AT THE BANK

Abraham Lincoln once said that in court, “the nominal winner is often a real loser—in fees, expenses and waste of time.” Talmadge knows this firsthand.

“I took over Merchants & Businessmen’s, and we were trying to install this new commercial policy software system that was supposed to be The Answer. It wasn’t. It wasn’t anything we thought it would be. It was beyond the pale. So the vendor [now out of business] says, ‘Look we know we screwed the pooch on this, we’ll fix it. Just give us a quarter-million dollars.’ I said, ‘That’s easy: No. Make it work.’ The president of the software company is in my office and asks me to think it over. I say, ‘Do it or we’ll sue you.’ He

Hillard Sterling, a litigator based in Chicago, says a well-written contract can help CIOs avoid a costly and embarrassing courtroom drama.



said, "The only people who will win then are the lawyers." That was the only thing he ever said that was right." He laughs.

"We went to arbitration. We had switched CIOs in the meantime [for unrelated reasons]. The old one came back as a witness, and he had documented the nonsense very well. We figured we'd kick the crap out of them. After three or four weeks, I'm paying lawyers and expert witnesses about 400 bucks an hour. It turns out we didn't have strong enough language in our contract—and we totally missed the [terms contained in the] delivery and acceptance clause—it was that simple."

Talmadge says the case resulted in a \$250,000 settlement. Legal fees came to \$150,000 of that. So Merchants took back \$100,000, which was equal to its license costs plus \$50,000.

"The worst thing in the world is being in litigation when you're right," Talmadge continues. "Because you're spending money to get what you're supposed to have anyway."

CIOs must work with lawyers to prepare contracts for the eventuality of a dispute, because often the vendor sues the buyer first, just as Triple Point sued Transammonia before Transammonia countersued. (In nearly all cases, experienced litigators say, lawsuits beget countersuits.)

But even trial lawyers will tell a CIO that litigation, especially over a software project failure, is a good card to hold but almost always a bad one to play.

First, there's the matter of timing. When projects start to slip, "the CIO has a vested interest never to sue the vendor, because it will acknowledge his failure," says Tobey B. Marzouk of Marzouk & Parry, an arbitrator who has handled more than 50 software project disputes. "Then, at some point, I can't say precisely when, the CIO has a vested interest in suing the vendor, because it will prove the vendor's failure" and lead to recovery of lost money. But timing this right is tricky at best, Marzouk adds.

Even in cases where the timing seems right and the cost-benefit equation clearly favors court action, there are wild risks. Marzouk tried a case with \$13 million at stake in which,

A Crash Course on Avoiding Software Project Disputes

Simple things you can do to avoid the hell of mediation, arbitration and court proceedings

PRIOR TO THE CONTRACT

- **Hire** outside legal counsel with contract law and software project experience.
- **Demand** data on investments in vendors from integrators and consultants who might have conflicts of interest. You have a right to know if their vendor picks are influenced by a financial stake.
- **Demand** that the vendor name any subcontractors it plans to use.
- **Ask for** references who engaged in similar projects. No references, no deal.
- **Research** past and current lawsuits in which the vendor was a participant.
- **Require** that the vendor has these insurance policies and that it will cover all damages you may be forced to seek.
 1. Commercial General Liability (CGL)
 2. Electronic Errors & Omissions (EE&O)
 3. Internet liability insurance
- **Hire** an independent consultant to analyze specific metrics the project must meet: response times, level of hardware, processing power and so on.
- **Save** all correspondence with bidders. Retain reporting and documentation of meetings and interactions.

IN THE CONTRACT

- **Specify** the functionality to be delivered.
Bad: "Typical CRM functionality"
Good: "A system that will amass data on goods sold in retail outlets that is stored in a database for instant and anytime retrieval by marketing personnel for data-mining purposes."
- **Mandate** performance-level testing.
"Database must return queries in less than two seconds with 100 concurrent users, under all conditions."
- **Specify** the minimum skill level and amount of staff for the project.
- **Mandate** a project plan including:
 1. Progress milestones that detail what

will function and how.

2. Payment due at each milestone.

3. The specific method by which there will be sign-off on these milestones.

- **Mandate** source code escrow and regular audits of the escrow so that you can take possession of source code or other intellectual property if the vendor suffers a disaster or goes bankrupt.
- **Require** that all contract provisions apply to subcontractors' work as if it were the vendor's own work.
- **Detail** a dispute resolution process:
 1. Describe specifically when mediation, arbitration and court proceedings will be used.
 2. Assign a specific "honest broker" or independent mediator to the project.
- **Mandate** a clause that specifies damages allowed in the event of a dispute.
- **State** that the vendor's liability isn't limited to any specific version of the software used in the project.
- **Don't sign** a contract that limits a vendor's exposure to lawsuits to, for example, one year after signing.

AFTER SIGNING THE CONTRACT

- **Create** a warranty that the vendor will address changes to the software as time goes on.
- **Make sure** the execution of the contract provisions is sound.
- **Follow through** on acceptance tests before signing off on milestones. Confirm that auditing of escrow source code is actually happening and so on.
- **If things go bad:**
 1. Call in legal counsel.
 2. Document everything.
 3. Keep the systems online—the best way to prove a system doesn't work is to show it doesn't work.
 4. Do not talk to the press.

SOURCE: CIO reporting

he says, his client had a strong case. But they lost. Not only did the company fail to recover its \$13 million, but it also had to pay a \$1.5 million counterclaim.

THE HIGH COST OF GATHERING EVIDENCE

Professor Thomas Richards of the University of North Texas, who cowrote a paper on software failure litigation (see “Information Technology Litigation and Software Failure” at www.cio.com/printlinks), doesn’t paint a pleasant picture, either. Richards used to serve as an expert witness in software disputes. “I gave it up,” he says. “I said to heck with this. It was too stressful. I remember I’m sitting in this room with four lawyers watching a screen with this [software] application on it. I was the one that was sup-

pose to become common in well-written software project contracts.

It takes arbitrators less time to wend through evidence and arrive at a ruling than court—weeks or months rather than years (in some cases, arbitration can be expedited). The shorter process means it costs less than court (though arbitrators can make \$3,000 per day). It’s private. And, know that if you’re the one with the beef, many lawyers we talked to say arbitration tends to be a slightly pro-plaintiff forum—just as a baseball player who goes to salary arbitration can expect a healthy raise.

But not every distinction between arbitration and court favors the former. For example, the rules of evidence are much looser in arbitration. “I had a case where several other companies had the same problem with a ven-

BEFORE LOSING CONTROL, MEDIATE

U.S. Can’s Quish saw her warehouse management software project failing. The first two deployments (of 10) went disastrously bad. Both sides had underestimated the job. The overall project plan was slipping. Tension was high. The monthly executive steering committee meetings were, in Quish’s words, “very unpleasant.”

And it was in this hostile environment, after two years of working with this vendor and with eight implementations to go, Quish says she and the vendor account rep decided jointly “to do something about it.” He suggested going offsite. She volunteered to facilitate.

So in this case, Quish herself was the mediator. The offsite meeting started with dinner,

“The worst thing in the world is being in litigation for a software project when you’re right,” says a former CEO. “Because you’re spending money to get what you’re supposed to have anyway.”

posed to extract information from it. They’re there charging their clients \$300 an hour, and I’m charging them \$250 an hour. And after all that, the case came down to one memo out of 10,000 that showed the vendor was using its client to basically beta-test the software.”

The process of recording witness testimony and gathering evidence is “a black hole of costs,” says Sterling. “It can take years with thousands of documents and dozens of witnesses.”

For those reasons, arbitration has emerged as a common alternative to court proceedings—so much so that arbitration clauses have

dor that my client did,” says Marzouk, “and we corresponded about it. They told me they couldn’t testify because of confidentiality agreements. So I submitted my correspondence with them as evidence. It was devastating even though it was hearsay. It never would have gotten into court.” (Of course, Marzouk adds, the opposing side can return with hearsay in kind.)

If full-blown litigation is hell, arbitration is somewhere just south of purgatory. Asked to characterize arbitration, Gesmer rattles off: “Unpleasant. Distasteful. Antagonistic. Extremely unpredictable.” In other words, arbitration is, well, arbitrary. And you spend time and money there that should be going into running the business.

“What I learned is, if you’re in arbitration, you’ve lost,” says Talmadge. “You’re sitting around a table with the president, the CIO, maybe a director and a lawyer? It’s already over.”

where work-talk was expressly verboten. “Two years working together and we had never relaxed,” she says.

The next morning she started the mediation with a simple question: “What are the issues that prevent us from being successful? No holds barred, put it on the table. It was an encounter. An intervention.”

Both sides let it fly. And it worked. They figured out what was wrong with the project and how to make it right.

If you want to save a foundering project by legal means, mediation is probably your only hope, and even then, it’s far from a guarantee. Among the three dispute resolution measures, it is the least antagonistic and the least formal. There are no witnesses or evidence. Most of the time it’s voluntary.

Most of the time, too, the mediator is an independent third party. Often, it’s a retired judge like William McDonald. “I like to start with a joint session, with both sides’ princi-

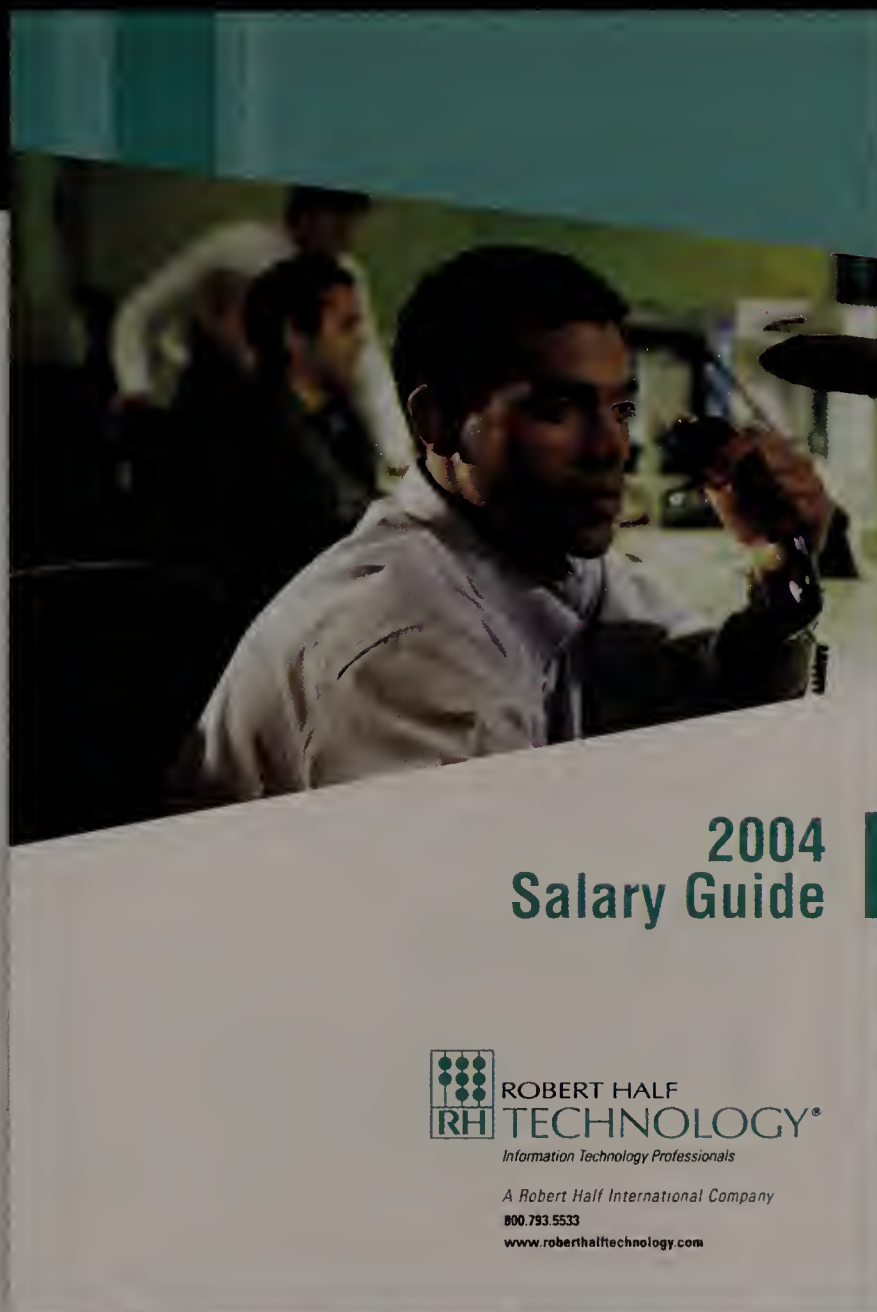
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pals, including the CIO,” says McDonald. “I let the lawyers talk, then I try to get the principals to state their cases without the legalese. The reason is they’ve probably been getting information tailored to what they want to hear until this point.”

After this initial meeting, McDonald says, the parties often retreat to separate conference rooms, the mediator shuffling between them like a parent brokering peace between bickering siblings. “At some point, as I sense we’re getting closer to a compromise, I’ll get more aggressive and evaluative. I’ll start saying ‘They’re going to say this in court. How would you combat that?’ And I’ll start suggesting

you start, inject the idea that if and when we hit roadblocks, we will invest in some sort of third-party mediation,” Quish says. “Actually, I loved doing it. You see such an improvement just by going through the process. If we hadn’t done it, the project would have been even more strained. No one would have wanted it, but it would have ended up in litigation.”

To McDonald, mediation is control. “In arbitration and a courtroom,” he says, “someone wins and someone loses, and often the dispute becomes public. In mediation, the parties haven’t lost control yet. It’s amazing how often parties discover their common interests in compromising just by going through the

The issues in this case aren’t much different from the Transammonia and Triple Point case, except there’s no subcontractor, and this case is taking longer. The suit was filed in April 2000. Many millions of dollars, Sterling says, rest on “two or three sentences in the contract and a couple of memos.”

Overall, the trial phase is expected to last four to six weeks, or as Sterling says his clients think of it, “30 percent of the fiscal quarter.”

Soon he’ll be going back into court to question one of his star witnesses. She’s in her second day of testimony, and Sterling says she’ll testify again tomorrow and maybe two more days after that. In the past three years, she’s

Mediation hurts less than arbitration and litigation. But it pays to engage this process at early signs of trouble. The further apart parties get in their views, the less likely mediation will help.

remedies, specific provisions, which don’t involve arbitration or litigation.”

McDonald says mediation typically lasts a few days, though the days can run well past midnight.

Good contracts will specify the rules of engagement with mediation, including when a mediator should be called in, how the process will be structured, and, in many cases, who will mediate.

Mediation hurts less than arbitration and litigation. But it’s relatively ineffective in troubled projects. The worse off a project, the further divided the sides, the less likely mediation will help. In the Transammonia and Triple Point case, mediation might have proven effective in August 2000, when PeopleSoft and Triple Point were lagging with the interfaces but still had months before their deadline. Six months later, with stop-payments flying around, mediation would have been useless.

At Quish’s offsite meeting, the sides worked out their differences. The next eight implementations went smoothly; U.S. Can finished them in the space of a year, or roughly the same time it took to get the first two done. “Before

process. I had one case where we had an agreement in principle at 7 p.m. The lawyers for each side then went into a room and bickered over the terms until about 10 p.m.

“At the same time,” McDonald continues, “the principals were in another room, working out their next deal.”

THE CIO IN THE WITNESS CHAIR

It’s quite a battle up here,” says Sterling, who talks on a cell phone during a recess from *IDX Systems Corp. v. St. John Health System*, in U.S. District Court in Detroit, Judge Denise Page Hood presiding.

Sterling is colead counsel for IDX, a software developer, which is suing St. John Health for, according to the court documents, allegedly backing out of a project. It would have been a fully integrated clinical information system that would tie together seven hospitals and more than 60 facilities, but St. John allegedly was short on money, and IDX is claiming breach of contract. St. John has, of course, countersued. (The parties declined to comment about their lawsuits.)

been deposed three times.

She works for St. John Health System, the company his client is suing. Her name is Claudia Allen. She’s the CIO.

Postscript: Before this story went to press, *IDX v. St. John* was settled under confidential terms. Sterling says the judge pressed for a resolution.

Not only will judges push for settlement—even 21 court days into a trial—“they’ll elbow you in the ribs if they see any willingness at all to settle,” Sterling adds. In this case, the judge’s rejection of several requests by the defense to limit damages motivated the sides to settle. “I will declare victory,” Sterling says.

As for St. John’s CIO, Sterling says he was able to contradict her testimony during his examination using document exhibits. “It was a dream for litigators but four days of hell for her,” he says. “She was exhausted. If you want CIOs to know the perils of getting into this, I wish we could just show them a videotape of that testimony.” **CIO**

E-mail feedback to Senior Editor Scott Berinato at sberinato@cio.com.



**INFORMATION
LIFECYCLE
MANAGEMENT IS:**

a strategy that uses people, processes and technology to store and tap critical business data throughout its lifespan of value.

IN THIS EDITION:

See how companies are evolving from the traditional notion of disaster recovery as part of a discrete storage and business continuity operation to a more holistic view of information protection and recovery that's rooted in business value.

Information Protection Isn't About Cost; It's About Business Value

IT SEEMS EVERY DAY we wake up to a new challenge to our organization. Like never before, the engines of global economic prosperity—people, capital, infrastructure and information—need to be managed for resiliency in the face of uncertain yet pervasive risks.

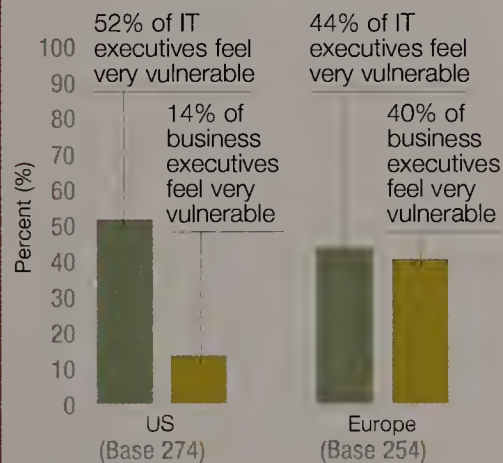
Information Lifecycle Management addresses the critical concern of how best to protect information vital to

commerce and public safety. The end goal is an information infrastructure that ensures the availability of critical information anytime, anywhere across the globe. Achieving this goal requires new thinking, technologies and management expertise needed to balance trade-offs in cost, risk and business value.

The challenge is to move toward this goal aggressively while operating within real-life budgetary, process and technological constraints. Information Lifecycle Management helps you do that by aligning the various classes of critical applications and data across your enterprise to the appropriate level of protection and availability.

According to Nancy Marrone-Hurley, a senior analyst at Enterprise Storage Group, a research company in Milford, Mass., applying Information Lifecycle Management practices to information protection and recovery can make a significant difference. "Data availability is one thing, and long-term lifecycle management is

DATA VULNERABILITY PERCEPTION



SOURCE: ROPER ASW STUDY,
RISK & BUSINESS CONTINUITY

AVAILABILITY &
PROTECTION**INFORMATION PROTECTION: WHY NOW?**• **NEW REGULATORY DRIVERS**

Sarbanes-Oxley, HIPAA, Basel II, InterAgency White Paper

• **HIGHER MARKETPLACE EXPECTATIONS**

Traditional Disaster Recovery which relies on moving tapes from a backup site to a hot site provides a 24 to 72 hour recovery timeframe. Many, if not most, customers won't wait that long before switching to a competitor's product or service.

• **BETTER OPTIONS, LOWER EFFECTIVE COST**

Hardware and telecommunications costs continue to decline while new availability options such as backup and replication using ATA storage technologies increase.

"When companies had a fairly siloed approach to applications, there were well-defined boundaries."

—Colin Rankine,
vice president in
the computing
infrastructure
group, Forrester
Research

another," she says. "The latter helps you know where information is, how to ensure that it's where it's supposed to be and is readily accessible. Information Lifecycle Management helps you prove the integrity of the data as well."

Marrone-Hurley and other experts cite a number of issues that make a lifecycle approach to data protection attractive. The first is the complexity that governs information management. Not only is information growing at an exponential rate, but it's becoming increasingly difficult to detangle applications as they draw information from each other. "When companies had a fairly siloed approach to applications, there were well-defined boundaries," says Colin Rankine, vice president in the computing infrastructure group at Forrester Research in Cambridge, Mass. "But as companies migrate to a distributed application architecture, applications have become interdependent."

The issue of regulatory compliance is also increasingly high-profile. HIPAA, Sarbanes-Oxley and Basell II are just a few of the most visible new regulations that mandate the way that many companies manage and protect corporate data. With the advent of this new regulatory environment, companies must protect information longer and have the ability to recover faster. Moreover, they must protect the right

data—and know when it's time to delete information that's outlived its function. "It's becoming more of an issue, and will likely continue as more regulations appear over the next couple of years," says Rankine.

Many experts recommend the following steps to success for information availability and protection:

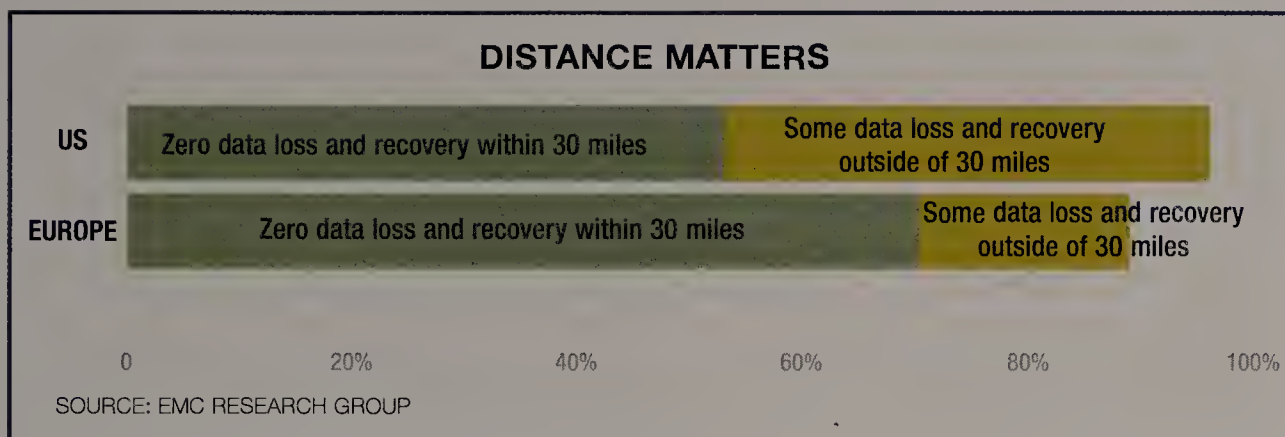
LEAD WITH BUSINESS REQUIREMENTS

Many CIOs will conduct a business impact study, which requires conversations with line of business (LOB) peers to get at the true business value of each application. To say it's a ticklish undertaking is to state the case lightly, says Marrone-Hurley. "It's very political," she says. "Nobody in the organization is going to think that their business data is less important than others'."

That's why, companies frequently call in outside assessment teams to help conduct the classification study, particularly in industries where regulatory compliance is an issue. "It takes a lot of discipline, and outside experts can provide some very helpful objectivity," says Gregg Therkalsen, vice president of business continuity solutions at EMC.

Once CIOs have an idea of the value of each application, they must formally classify them. Therkalsen advises that IT executives use at least three different categories of service-level importance:

- **Mission-critical**—This includes applications that will, if interrupted, result in severe financial, regulatory or safety issues for the company. "We're talking about systems that are so vital that if they are taken down, they'll severely disrupt the company and potentially broad sections of our economy," says Therkalsen. Recovery time for these applications will be in seconds, minutes or several hours.
- **Essential**—Therkalsen classifies most supporting business systems, such as financial analysis applications, in this category. These systems must not be down more than a day.
- **Deferrable**—This includes applications that contain data that is used periodically, such as market analyses. These applications



Forty-two percent of US IT executives are willing to accept data loss in order to increase distances to their secondary sites. European IT executives are less likely to make this trade-off.

are looking at a recovery time of 24 hours or longer.

Marrone-Hurley points out that business value isn't always related to monetary value. Certain kinds of data, for example, must be stored according to levels of availability and integrity mandated by regulatory compliance, and availability service levels must reflect this.

DESIGN FOR SUCCESS

Armed with a clear agreement on the critical classes of applications and data, the work of designing solutions begins. There are five key design principles for building a resilient, highly available information infrastructure:

Replication. Information is typically backed up so that companies can recover

FIVE KEY INFORMATION INFRASTRUCTURE DESIGN PRINCIPLES

- REPLICATION
- GEOGRAPHIC DISTANCE
- CONSISTENCY
- ACCESSIBILITY
- COST AND PERFORMANCE

from operational failures and major business disruptions as well as archive data in accordance with business and regulatory requirements. These requirements are converging and should be viewed as one enterprise-level business requirement.

Geographic Distance. Consolidating information processing into one center can save money, but it also creates vulnerability to a single risk event. Systems need to be designed for both economies of scale and distribution of information across suitable distances.

Consistency. Data and applications are often backed up at different times of day or week, making it nearly impossible to "restart" the enterprise at a single point in time. Backup and replication to a single point in time is a critical underpinning of a well designed infrastructure.

Accessibility. Anytime, anywhere access to information requires geographically redundant and diverse network connectivity that enables workers to continue operations from various remote locations.

Cost and Performance. The optimum design provides for backup, recovery and high availability in a fashion that is both cost-effective and enables the right level of protection to be applied to the appropriate class of applications and data.

By applying different levels of protection to different levels of information, companies can tie the right price and performance levels to each group of information. "I compare it to how people might protect personal information," says Mark Lewis, the chief technology officer at EMC. "The most important records are in a safe deposit box in a bank, more moderately important records in a fire safe in the house, and others are in a desk drawer. Each method has different costs associated with it that corre-

"Business value isn't always related to monetary value."

—Nancy Marrone-Hurley, senior analyst, Enterprise Storage Group

AVAILABILITY &
PROTECTION

spond to the business value of the data.”

Further, if the CIO can give a dollar value to the different levels of protection, it allows line of business executives to make decisions based on numbers, not technical jargon. “It enables the CIO to go to a business executive and say, ‘If your applications are vital, protecting them will mean an investment of X dollars. If you don’t think you want to pay that, you can have less protection for Y dollars,’” Marrone-Hurley says. “This allows the LOB executive to weigh information protection in terms of what it’s going to do to his P&L, and they can begin to cost-justify the investment necessary to protect each level of application.”

MANAGE CHANGE

Of course, shortly after you classify your applications and design and implement the appropriate level of protection, your business requirements will change and new processes and technologies will be introduced. Any protection and availability program that does not anticipate and allow for this fact is seriously flawed.

Ron Williams, a senior manager at the operation center at EarthLink, a \$1.3 billion ISP based in Atlanta, says his company is working on a tiered storage strategy as a way of managing burgeoning data caches in conjunction with business value. “What EMC has been doing for a while is providing the ability to move data that needs to be accessed faster to storage that can deliver it faster,” he says. “So much data changes in value so fast, so we need to seamlessly tie tiers together.”

Building a successful alignment strategy is an ongoing process, stresses Therkalsen. “New applications are introduced so fast that we recommend revisiting [a strategy] quarterly, and at a minimum twice annually,” he says. “If you don’t turn this into a regular business practice, you’ll have to repeat the process from scratch a year later.”

More and more, companies can use tools to create automated service policies for each level. “That’s the value-add we expect to see in software solutions,” says

FIVE KEY ENABLING
TECHNOLOGIES

• CLUSTERING

Automatic failover to a secondary site

• OPTICAL AND SONET
TRANSPORT

High-speed data transport for data replication and failover

• ENTERPRISE-CLASS BACKUP

Enterprise-wide data backup, leveraging backup-to-disk technologies such as ATA

• REPLICATION

Local and long-distance duplication of data to ensure a consistent restart for the enterprise

• VIRTUAL INFRASTRUCTURE
MANAGEMENT

Ability to run multiple operating systems and applications simultaneously

Marrone-Hurley. “We’ll see more intelligence going into software where it monitors service levels and sets policies.”

In an era of global data centers and companies that have tightly intertwined supply chains with partners and distributors, the ability to protect information is increasingly vital to the success of the enterprise. As such, companies must manage this task at a very high level, and make sure that their protection and recovery policies are driven by the value of the information first and foremost. Information Lifecycle Management can help do that.

“Our vision of Information Lifecycle Management is a very integrated function where you can specify types of information protection and recovery,” says Lewis. “Information protection is something that companies must take very seriously.”

NEXT: In the next part of this series, we’ll look at new compliance and governance regulations.

QUESTIONS ABOUT
INFORMATION
LIFECYCLE
MANAGEMENT?

If you’ve got any burning questions about Information Lifecycle Management—and how you can begin implementing such a strategy—send them to ilm_questions@emc.com. We’ll answer the most frequently asked questions later in this series.

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Case Files: Lear Corp.'s Outsourcing Contract

ORGANIZATION

Lear Corp.

PRINCIPAL BUSINESS

Automotive parts manufacturer

HEADQUARTERS

Southfield, Mich.

URL

www.lear.com

BUSINESS PROBLEM

An outsourcing deal inherited from an acquisition cost far more than it was worth to Lear's CIO. But the contract obligated Lear to continue paying.

THE PLAYER

JOHN CRARY

CIO and VP of IT

CASE ANALYST

MICHAEL GRIEVES

Director of Industry Research
MIS Department, Eller School
of Business
University of Arizona

Filing for Divorce

Lear was able to end a costly outsourcing contract early by building a business case—and then finding the right person to talk to

BY EDWARD PREWITT

JOHN CRARY, THE CIO and vice president of IT for Lear, an automotive parts manufacturer that's number 131 on the Fortune 500 list, uses outsourcing to save money and free up his IT budget for other purposes. He holds contracts with three different IT outsourcing vendors for a range of activities, including Lear's help desk, basic data processing and high-end ERP support. Crary is very practical about his outsourcing deals, judging the success of each relationship primarily by the savings he accrues.

So when his arrangement with Hewlett-Packard turned out to be costing Lear more money than it was saving, Crary wanted out. But the 1999 contract contained no clause for exiting the deal early. Crary needed a plan for cutting his outsourcing costs without raising his legal fees.

SHOTGUN WEDDING

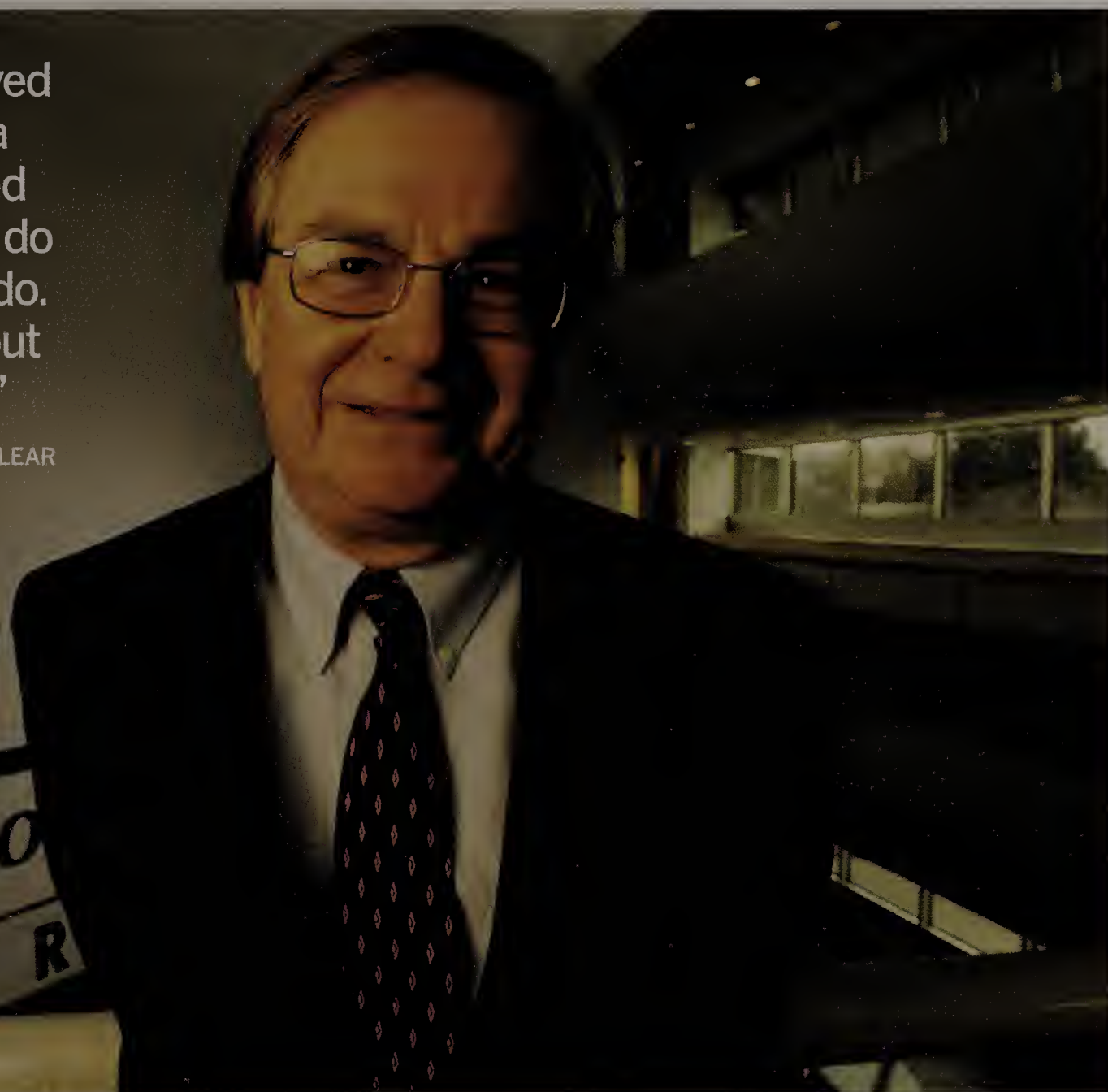
Lear is the fifth-largest company in the intensely competitive auto parts industry. The company

recorded \$14.4 billion in revenue in 2002. It employs 115,000 people at 283 facilities in 33 countries. Lear grew to its current size through acquisitions. Starting in the late 1980s, Lear went on a massive shopping spree, making 17 major purchases. One of its last acquisitions was the automotive division of conglomerate United Technologies Corp. (UTC) for \$2.3 billion in 1999.

As part of the UTC deal, Crary inherited a contract with a large Hewlett-Packard data center in Atlanta. Negotiations for the purchase of UT Automotive were handled by Lear's mergers and acquisitions team, with minimal input from Crary. Although the arrangement with HP was presented to Crary as a contractual obligation, he could have pushed for a change of terms had he chosen to do so. But at the time, the outsourcing deal seemed in his interest, and he had many other, more pressing integration issues to deal with. "I had a lot of fish to fry at first, and noth-

"Me and my team played the what-if game for a few days and agonized over how to get HP to do what we wanted it to do. We went through about 10 what-if scenarios."

—JOHN CRARY, CIO, LEAR



ing was broken, so I left it there," he says.

The data center had formerly handled multiple UTC functions—from HR to finance to ERP—across the entire enterprise. After the acquisition, HP transferred the data of the Lear subsidiary into a separate set of servers that handled only Lear data. At a stroke of the pen, Crary became an HP customer for plant ERP, corporate finance and EDI to its auto manufacturing customers. (Lear was already a big HP customer for PCs, mainframe processors, network monitoring, information security monitoring and other services, all of which amounted to several million dollars in sales each year.)

The annual cost to Lear of the inherited contract was high—about \$3 million a year. The HP data center was a high-end, highly secure facility, built underground with air

locks and multiple generators. "It's built into the side of the mountain. In a nuclear war, we'd all be dead, but that thing would still be running," Crary says.

He soon decided that was more security than his data needed—certainly more than he wanted to pay for. What's more, because most Lear plants are in the Midwest, and the data center was in Atlanta, the data transfer costs were excessively high—\$12,000 a month.

MARRIAGE ON THE ROCKS

Nine months after the UTC acquisition, Crary had dealt with the transition details sufficiently so that he was ready to address the high costs of the HP deal. He had his IT managers begin informal, information-gathering discussions

with HP representatives about how to bring the cost down. The IT managers reported back to him that there was no way for the Atlanta data center to change the configuration of the servers that handled Lear's data to a lower-cost setup. "We were one of their smallest customers, even at a few million [dollars]," Crary says. The Atlanta data center was built to process huge amounts of data in high-end applications; there were no economies of scale for small customers. HP representatives raised the option of transferring Lear's data to a smaller data center in Toronto. But when communications costs were figured in, the cost was not far off from that of the Atlanta center.

Crary realized that he had a third alternative: Bring the data center in-house.

A building in Dearborn, Mich., acquired

in the UT Automotive deal, contained a relatively empty data center room. It had false floors that would facilitate rewiring and proper ventilation. With a new generator and a few partitions, it would suit Lear's needs perfectly.

What's more, Lear's IT staffers had the technical capability to run a data center because of the Unix-based work they already did with two SAP and PeopleSoft ERP systems. "I had the facilities in place and the expertise on board," Crary says. No new staff would be needed. He calculated that the money he would save by bringing the data center in-house would come to \$900,000 a year. Included in that figure were the fees to HP, the telecommunications costs and added costs such as the new generator. The payback would come in only 22 days (the first-month savings from not paying HP).

AMICABLE SPLIT

All this sounded good to Crary, but there was that little matter of the inherited contract. Crary asked Lear's general counsel to review it to see if there was any wiggle room. The general counsel said no way. There was no provision for an early exit. Lear was obligated to pay the full annual fee of \$3 million for the two years remaining on the contract.

Crary then pulled together a brainstorming team, consisting of all his IT staff that had had any dealings with HP, including Lear's data center director, people who purchased HP PCs and those who worked with HP services. The legal department was not invited. The purpose of this team was to try to predict how HP would react to Lear's request to end the contract early.

"Me and my team played the what-if game for a few days and agonized over how to get HP to do what we wanted it to do. We went through about 10 what-if scenarios," Crary recalls. These ranged from moving to HP's Toronto data center to just sucking it up and finishing out the contract. To Crary's frustration, the brainstorming team members were all over the map in predicting reactions from HP. Each person was working from the narrow viewpoint of his

NEGOTIATING LONG TERM? FIND A LONG-TERM THINKER

BY MICHAEL GRIEVES

DON'T BE FOOLED by Lear CIO and Vice President of IT John Crary's simple "Why don't I just ask them to let me out of the contract?" approach. Crary has a terrific, well-deserved reputation for direct problem-solving based on his belief that meticulous fact finding, along with solid analysis, will trump gamesmanship every time.

There are two important lessons we can learn from Crary's case. One is strategic; the other tactical.

The first lesson is that strategies need to be flexible and linked to outcomes. Crary doesn't have an outsourcing strategy; he has a *sourcing* strategy. He believes in sourcing based on gap analysis and resource analysis. In gap analysis, Crary looks at what he has versus what he needs and adjusts accordingly. In this case, the gap was not a deficiency but an excess of capability: HP's expensive, high-level security. Crary then looked at his resources and concluded that he had the capability to bring the services HP was providing in-house.

Forget core-versus-context discussions. The auto industry typically outsources core functions to trusted suppliers. As a whole, the industry uses a gaps-and-resources strategy. It is therefore not surprising that Crary applied those same principles to IT.

On the tactical side, Crary employed two negotiating concepts: personal impact and shadow-of-the-future. Personal impact concerns the effect the deal has on the people conducting the negotiation. Shadow-of-the-future simply means first understanding the impact—either short or long term—that the transaction on the table will have on future business dealings.

If Crary were offering business to HP, then dealing with a salesman—someone whose personal impact is high (meaning he profits personally from the transaction) and whose shadow-of-the-future is short (meaning that right now this deal is more important to him than any deal down the road)—makes good sense. The salesman will be highly motivated to close the deal, and therefore Crary can easily maximize the value he derives from it.

Taking business away is trickier. For that reason, Crary wanted to negotiate with someone whose personal impact is low (that is, abrogating the contract won't affect his compensation or career) and whose shadow-of-the-future is long (meaning he's invested in the ongoing relationship between the two companies). A manager with a portfolio of customers can be expected to be less concerned with a single, smaller transaction. Add to that a longer shadow-of-the-future (the business a \$14 billion company such as Lear can be expected to generate) and you have a pretty good opportunity to get the outcome you want.

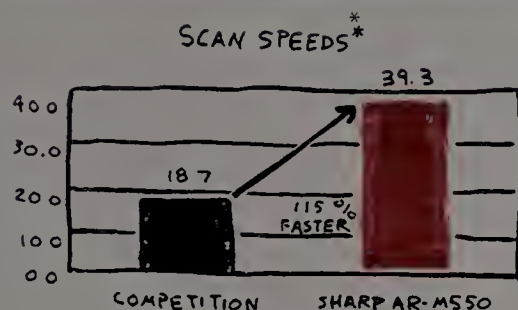
Tactically, Crary needed to find someone at HP whose interests would be aligned with his own. He did his homework to find the right person, laid out his proposition and got his deal.



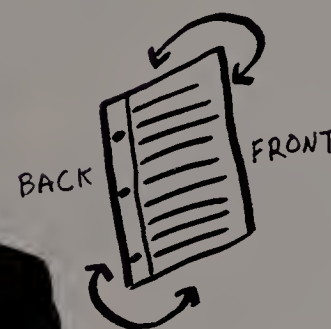
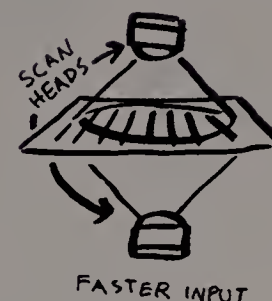
Michael Grievess is the director of industry research in the Eller School of Business's MIS Department at the University of Arizona and chairman of the University of Michigan's annual AUTOe Conference. He can be reached at mgrievess@attglobal.net.

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personal experience with a particular HP division.

Eventually, Crary says, "it got to the point where I said, 'Why don't I just ask them.'" He reasoned that the direct approach—explaining why he wanted out of the contract—had the highest likelihood of working. But before he picked up the phone, he strategized.

First, there was the matter of whom to call. With the parochialism of the internal brainstorming team still fresh in his mind, Crary decided he should go up the decision ladder at HP. He wanted someone who held a big portfolio and therefore a broad view. Reasoning that Lear was a good-sized account for HP in the auto industry (all those PCs), Crary sought a manager with P&L responsibility for the entire auto industry. A manager whose P&L ended with the Atlanta data center, or with Lear, might not see the big picture. After asking around, Crary's direct reports soon learned that a regional vice president for solutions, based in Chicago, fit the bill.

Crary wanted to deal with this vice president in person. "I knew it was going to be very touchy. By doing it face-to-face, I'd be able to read the situation and react very quickly," he says. Rather than flying to Chicago, however, Crary asked to meet the regional VP at the Atlanta data center. "I wanted to get in front of the [HP] people who had done the work," Crary says. "I didn't want them to get defensive, to think they'd 'lost' Lear. I wanted to get across the point that it wasn't a matter of their work. It was excellent service. It just wasn't for me."

Crary played it straight at the meeting, simply explaining that he was losing money and wanted out of the contract early. The response from HP's regional vice president

was gratifying. "That makes all the sense in the world," he told Crary. "We don't want to lose money, but we don't want an unhappy customer." Crary happily paid HP the \$125,000 that it cost to move Lear's data out, and the outsourcing deal was ended.

Four months later, Lear's new Dearborn data center was up and running. Crary had to spend another \$200,000 in preparation costs (most of it for the generator), which left him with \$575,000 in savings for the year.

LEAR'S LESSONS

Lear IT staffers were delighted with the change. "It gave them control. They got their data center back. It was an unexpected morale boost," Crary says. The in-house data center also made trouble-shooting easier. But the primary benefit was the lower cost. "It was all about saving money," Crary says. Because of the recession, "the environment is more strenuous today."

For his part, Crary was delighted with HP. "The way [the negotiation] turned out was extremely positive," he says. "Had it not been, would I have had a negative thought about [HP]? In all honesty, probably." Instead, Crary continued sending the bulk of his hardware and services needs to HP, including all of Lear's data center gear. "I came away thinking that these are first-class people. It probably caused them some pain [to break the contract], but they truly had the right focus: on the customer," Crary says.

Crary took away two lessons from the experience. The first is to scrutinize outsourcing contracts. "You have to be careful what you get into," he says. Although HP obliged Crary's request to break the contract, there was no guarantee that it would do so. The success of the negotiation leads to Crary's second lesson: the importance of personal dealings. By appealing to an individual rather than to the letter of the contract, Crary was able to arrive at a resolution that was a good deal for both parties. **CIO**

Leadership and Management Editor Edward Prewitt can be reached at eprewitt@cio.com.

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HOW TO MAKE YOUR BEST



Doug Horton, director of strategic technology initiatives for LandAmerica Financial Group, says it's important to factor in your company's key financial information when building a business case.

CASE

As the great IT budget freeze begins to thaw, you must either sharpen your project presentation skills or be cut out of the loop. Take heart—our five rules practically guarantee business case success.

BY LAUREN GIBBONS PAUL

Which would you rather do: prepare a business case for your latest project or sit for a root canal? No surprise if you chose the latter; most CIOs hate everything about business cases—the politics and the mystifying financial lingo. But these days, the ability to put together a compelling business case is a core competency for CIOs.

A strong business case is critical for effective IT governance, and having one is more important than ever with the increased scrutiny on corporate decision making. “There’s real urgency to get this right. Decision making is much more visible than it used to be,” says Jack Keen, president and cofounder of IT consultancy The Deciding Factor, coauthor of *Making Technology Investments Profitable* and a CIO columnist. “CIOs have an unusual opportunity to come to the rescue in terms of defining the business value of IT.”

That opportunity is key, since many CIOs are finding their credibility is at an ebb. If you can’t demonstrate technology’s worth to your organization, you risk losing your spot in the boardroom. The good news: CIOs who succeed at building solid business cases attain greater visibility.

Reader ROI

- ▶ Why business case writing is a core competency for CIOs
- ▶ The importance of teaming up with business partners
- ▶ The key success factors for effective business cases

It is undeniably positive for your career to lead a successful project backed by a sound business case and with proven benefits. How do you know if your business case skills need improvement? If you’ve been turned down on any of the major projects you proposed in the past year, chances are you haven’t done your homework. By adhering to the five essential rules that follow, you can sell your project as a winning initiative.

KNOW YOUR COMPANY'S NEEDS

Before you start to build a business case, you need to obtain some financial information about your company. For instance, most companies have a hurdle rate, or the rate of return required by the organization to fund a project. "If a project has been diligently reviewed and can achieve a 12 percent or 13 percent or better rate of return, then it's in the best interests of our shareholders to pursue," says Doug Horton, vice president and director of strategic technology initiatives for \$2.6 billion LandAmerica Financial Group, a title insurance company.

Hurdle rates don't change much in the short term. Except in the case of a technical infrastructure investment (such as a network upgrade), you're going to have to prove you can meet this threshold or there's no point in continuing.

Sometimes IT leaders make the mistake of believing the corporate hurdle rate does not apply to IT projects. Or they assume there isn't one. "In many cases, people don't even bother to find out what the hurdle rates are," says Keen.

You also need to know what other corporatewide projects are vying for funding. "I assess the financial value of each project as if it were a machine tool because that's what I'm competing against," says John Nordin, vice president and CIO at A.M. Castle, a \$538 million distributor of specialty metals. There is no separate pot of money labeled "IT." The CEO sees technology projects as going head-to-head with mainline business projects; you should too.

That same competition for resources also happens within IT. Prior to deciding which IT projects to undertake for the year, Bob Weir, vice president of information services at Boston's Northeastern University, interviews his business counterparts, asking them 60 questions that get at the heart of the project's value to the institution. Based on the answers, he derives a numerical score. "The point of the exercise is to get a score relative to the other opportunities that we could undertake," says Weir. In 2003, there were 36 potential IT projects. Of these, the top 17 were selected, and the rest were put on hold. That is an example of IT portfolio management, in which the CIO, in conjunction with business

Business Case Best Practices

Here are some key steps you can take for business case excellence

- Present the business case in two stages. First, produce a two-page outline. If this "mini business case" survives the first rounds of scrutiny, create a longer document that delves into cost-benefit details.
- Develop a high-level time line with project milestones. Outline and describe strategies for dealing with and mitigating as many risk factors (including change management and market risks) as possible.
- Outline three different scenarios (such as best case, worst case and most likely case), including cost, time line and ROI particulars of each.
- Prepare a multifaceted ROI analysis, including a detailed breakdown of costs (for hardware, software, consulting, training, support and other costs) and cash flow throughout the lifecycle of the project.
- Include soft benefits. Even if you cannot quantify the soft benefits, you should include them since intangibles often sway the outcome.
- Identify the type of value the project will deliver. For example, project benefits could be categorized as cost reduction, revenue generation, competitive advantage, risk reduction or regulatory compliance. These categories give decision-makers context that aids in making their decision.
- Take a portfolio approach. On an annual basis, work with senior management to set targets for IT project types (for example, 50 percent of projects will help run the business, 30 percent will help grow the business, and 20 percent will help transform the business.)

-L.G.P.

leadership, categorizes the proposed projects (such as those that will help run the business, those that aim to grow the business and those that have the potential to transform the business) and sets targets for how many projects the enterprise will undertake in each category (see "Portfolio Management: How to Do It Right," www.cio.com/printlinks).

PARTNER WITH A BUSINESS SPONSOR

It should be clear that in most cases CIOs shouldn't undertake technology projects without the active involvement of the business managers. "It's very difficult for the technology group to build a business case unless there's a partnership with the business management team," says Debra Still, executive vice president and chief operating officer for Pulte Mortgage (a subsidiary of Pulte Homes). "We have an IT representative, a business representative and a project manager put together every business case."

The IT person lays out the technology alternatives to the problem, providing data on features, costs, and training and support implications. The business representative reviews the alternatives and determines which one is the most beneficial and makes the most sense for the business. The project manager lays out the time line, sets scope, identifies milestones and analyzes project resources. Last March, Still and Pulte Mortgage CIO Rod Hardin followed this process in building a case for a \$1.5 million business process management initiative. Pulte senior management approved the project, which will have projected cost savings of 10 percent to 20 percent in its first year while also improving customer service.

Niel Nickolaisen, CIO at Deseret Book, a book publisher and retailer, has his business partner present the case to the executive steering committee, and he provides the details about project cost and approach. "I'm there to answer any questions on the technology side. My partner makes the case for the business benefits," says Nickolaisen. This approach demonstrates that IT is aligned with business objectives. It also encourages business heads

to treat the CIO as their trusted internal IT consultant, which goes a long way toward avoiding rogue IT projects.

At Fidelity Wide Processing, a unit of Fidelity Investments, the IT staff consults on every business case, whether or not the project is primarily technology-oriented. "There are very few investments that do not have a technology aspect," says Douglas Sutton, president of Fidelity Wide Processing. Each case is a collaboration put together by IT, finance, operations and the line of business that the case will directly affect.

BUILD A RATIONAL COST-BENEFIT PICTURE

In conjunction with your business sponsor, categorize the project by type and then drill down into its anticipated benefits. Benefits can be both tangible and easily measured (hard benefits), or difficult to quantify and measure (soft benefits). Project advantages can vary and include financial benefit, strategic alignment, improved customer satisfaction and risk reduction.

Be sure to include different scenarios to ensure an element of risk assessment. If your ROI is riding on increasing sales, for example, you need to take into account the fact that the increase may be less than anticipated or may not occur at all. If the benefits don't materialize, you'll have to spring into gear, either explaining why they didn't pan out or doing the additional work to make them happen.

Sutton was dismayed recently when he discovered that only 12 percent of Fidelity's business customers were using a new Web ordering system while the promised adoption rate had been 80 percent. The IT team had done all the work gathering customer requirements and rolling out a technically sound solution—which cost in the high six-figures. But the IT team failed to take into account the need to reeducate customers and internal users on the value of using the system. "I told my technology group, 'You dropped the ball,'" says Sutton. Now, the IT team is working on educating users to boost the adoption rate. Sutton expects to see 80 percent business customer usage within 90 to 120 days, an additional investment of staff time, not money.



Debra Still, executive VP and COO of Pulte Mortgage, and CIO Rod Hardin worked closely in forging a business case for a \$1.5 million business process management project. Such collaborations between business and IT executives are key, they say.

From this experience, he has learned to always include in the business case the change management implications of any project.

In addition to risks associated with users' behavior you'll need to assess risks inherent in your industry. For example, when Pulte Mortgage undertook the business process management project last year, the business case identified a number of discrete phases in the project and prioritized them. If economic conditions tighten up, Pulte can elect not to fund the phases with the lowest priority ratings.

Being conservative in this cost-benefit phase will go a long way toward preserving your credibility. Joe Lacik says of his experience at a large telecom company, the game would go something like this: "People would come and ask, 'How much would it cost to build this system?' I would say, 'It will cost

\$1.2 million.' Amazingly, no matter what number I said, they were always able to write a business case that would make money." Lacik, now vice president of information services for Aviall Services, an aviation parts distributor, changed the process so that one party would assess the potential benefits while a second person would assess the costs to see if the two matched up favorably.

DON'T IGNORE SOFT BENEFITS

Traditionally, one of the thorniest business case problems is quantifying soft benefits such as increased brand image and customer satisfaction. When you are lucky enough to have hard numbers on your side, your tendency might be to leave out discussion of soft benefits altogether.

But it's a mistake to leave out the soft benefits because you can't know in advance what will sway the decision-makers. "People make

Business Cases

decisions based on intangibles much more than tangibles,” says Keen. You may think you have an airtight business case based on hard benefits, but the CEO may not agree. “Put the intangibles in as a buffer,” he says.

Use the soft benefits to tell a story in the business case. To hedge against unpredictable soft benefits, Deseret’s Nickolaisen breaks up the business case for a large implementation into distinct phases. “The benefits are sometimes pretty iffy. We don’t move on to Phase 2 if we haven’t received the benefits from Phase 1,” he says. “In this case, we spend less time on ROI and more time on how we’re going to verify the benefits.” This approach lowers risk as decision-makers can elect not to continue with a large project if benefits don’t meet expectations.

Some projects are necessary to further strategic corporate goals. These are often tough to quantify in terms of hard numbers. For example, in the early days of the Web, there were no metrics to measure the value of creating a website. Companies simply believed the Internet was the future of business.

MAKE THE BUSINESS PARTNER OWN THE BENEFITS

Don’t make promises you can’t keep. In other words, make sure the business unit that will benefit from the new system takes formal responsibility for making the benefits happen. For example, if a new software package will reduce headcount in HR, be sure the head of HR agrees to make those cuts. If not, the organization will never realize the value of the investment.

“We hold people accountable; there has to be a sponsor for each initiative, and that sponsor is responsible for ensuring that the results are delivered,” says Sutton. “The goals must be set up front and agreed to before any

For More on Business Cases

In addition to following our five rules for business case success, it will further your cause if you can present your good arguments on paper. Online we offer a sample **I.T. PROJECT RECOMMENDATION TEMPLATE** that might help cement your next case. Go to the online version of this article to find the link.

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Bob Weir, VP of IS at Northeastern University, uses a portfolio management system consisting of scoring and intensive interviews with business counterparts to prioritize IT projects.

investment is made.” When that goal involves productivity gains and headcount redeployments, Sutton makes sure the business leaders will follow through before committing the dollars. “We identify the individuals who will be refocused once a system is implemented, or we want to know how much more volume we’ll be doing without adding people.” There’s a natural tendency for function heads to hold onto their people, even though they built their business case on anticipated headcount reductions.

As CIO, you can provide cost-effective, useful technology, but you can’t single-handedly generate the benefits. Your business case must reflect this basic fact by—at the very least—getting the business leader to sign the part of the case that discusses the benefits.

Nickolaisen learned this belatedly. After a project failed to achieve its promise, “the business units would come to me and say, ‘Niel, I

thought this was going to reduce inventory by 15 percent.’ And I would say, ‘I manage a bunch of programmers; I can’t make that happen.’ That was one of my big lessons learned.” Now, when preparing a business case, Nickolaisen goes to his business partner and asks, “Which benefits are you willing to take responsibility for?” This puts the onus where it should be, on the person who can effect the required change.

Preparing a business case is more art than science. But once you get the hang of it, it can be fun. Says Nickolaisen, “I kind of like preparing a business case. [The business sponsor] leads me through the case, and I lead him through the case. It improves my credibility and access.” **CIO**

Lauren Gibbons Paul is a freelance writer in Waban, Mass. She can be reached at lauren.paul@comcast.net. Send your business case stories to Senior Editor Mindy Blodgett at mblodgett@cio.com.

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Steve Sutherland, CIO at real estate giant CBRE, has been waiting for years to give his brokers wireless data access. Finally, there are reliable networks, good devices and cost-effective applications. "The barriers to entry are gone," he says.

Wireless Finally CONNECTS

Sure there was a lot of hype when wireless broke onto the scene more than three years ago. But CIOs responding to our survey say the hype has turned into solid value when it comes to devices, networks and applications.

BY BEN WORTHEN

There's only so much hype a technology can take before people turn their backs on it. And so when the economy and tech spending slumped, it was understandable that CIOs stopped looking at wireless as *the next big thing*. But now it's time to take another look: The technologies that make wireless work have gotten better. So much better that the respondents to CIO's wireless survey (our third since the fall of 2000) said they are actively looking beyond personal productivity tools such as e-mail to business process applications such as updating inventory and accessing medical records.

That's right. Wireless is back.

Want proof? Seventy-five percent of our respondents are currently undertaking a wireless project. Furthermore, attitudes toward wireless technology are returning to levels last seen when the Nasdaq surpassed 5,000. Indeed, a whopping 68 percent said wireless is either important or somewhat important—the exact same percentage as in 2000. Sixteen percent cited wireless as extremely important to their current business goals (for more results from our wireless survey, see Pages 64 and 68).

Reader ROI

- ▶ Why wireless projects are back on CIOs' to-do lists
- ▶ What CIOs see as useful applications for wireless implementation
- ▶ Technology advances that make wireless projects less costly

It's worth putting these attitudes in perspective. A year and a half ago, CIOs were so down on wireless that we didn't even bother including questions in our survey about the technology's importance to business plans. IT executives such as

Wireless Applications

Thomson Financial CTO Jeff Scott simply explained that interest “has cooled a bit for [wireless] services, either because of the market conditions or a changed view of ROI for wireless, or both.”

ROI is hard to come by, and for a simple reason. Wireless projects depend on three elements: the device, the network (whether that’s via a cellular carrier, a satellite connection or a Wi-Fi LAN) and the application. If one of those elements isn’t up to par, then the project won’t work. No one uses cumbersome devices; people give up if they can’t connect to the network, and there’s no point in doing a project if you can’t deliver

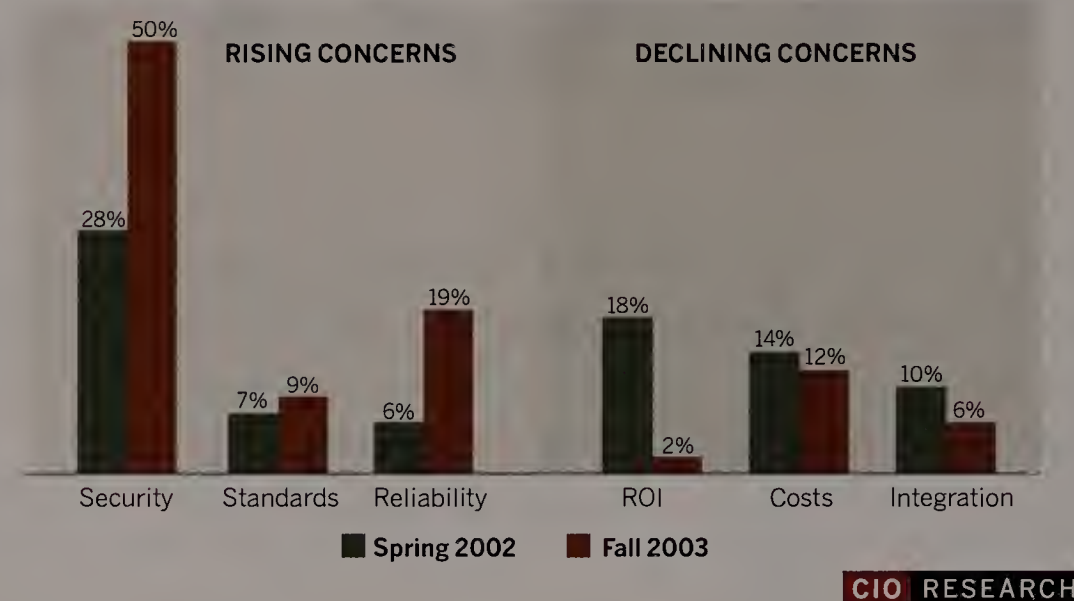
Redman, research vice president for wireless at Gartner.

Devices now have color screens, more memory and faster processors. Such improvements enabled Judith Flournoy, CIO of Kelley, Drye & Warren, to give her law firm’s attorneys BlackBerrys to wirelessly e-mail legal documents. With network access in place, “these devices enable everything else,” says Flournoy.

Added to that: Cellular carriers now support IP packets, meaning data can pass over existing voice networks. And wireless LANs have improved in the area of security.

Wireless Then and Now

Half of CIOs cite a lack of security as the greatest barrier to adoption of wireless projects



Methodology: CIO administered an online survey from Oct. 1 through Oct. 15, 2003. CIOs, vice presidents of IT and directors of IT were selected from CIO's circulation file and invited by e-mail to take the survey. Results are based on the responses of 250 IT professionals in a variety of industries and government agencies. CIO also conducted a wireless survey of 270 CIOs and other IT executives in spring 2002.

the data. By 2002, most CIOs who tried wireless projects had encountered one or more of those problems. Devices had small screens that made it hard to view data, they ran out of batteries quickly—sometimes wiping out all the information in the process—and they were expensive. Networks, meanwhile, were proprietary, expensive and slow—and that’s when there was coverage. Project after project failed.

The ones that succeeded fell into predictable categories. The companies had large mobile workforces, depended on data from those workforces and, most importantly, could afford to invest in custom devices, proprietary coverage plans and homegrown applications. Common examples were trucking companies that tracked their drivers with GPS devices, shipping companies offering delivery confirmation, and utility companies whose repair crews collected large amounts of data about problems and fixes in the field.

Today, things are different. Both devices and network technologies have improved by leaps and bounds in the past year or so, says Phillip

The result is better, more reliable coverage and more bandwidth, which Thomas Jarrett, CIO and secretary of the department of technology and information for the state of Delaware, says makes it possible for him to outfit state employees with wireless laptops.

Also, says Redman, prices for both devices and network time are dropping between 15 percent and 20 percent each year. There is still work to be done on the application side, but many vendors, such as Microsoft, PeopleSoft and SAP, to name just three, are building wireless functionality into new versions of their software.

What it all boils down to, says AMR Research Director Dennis Gaughan, is that wireless technology is now available off the shelf, and even companies with long-standing investments in custom-developed wireless systems are starting to use commercial products and services. “It’s making wireless a lot easier,” he says.

The result is that CIOs—any CIO—can once again pursue wireless. According to CIO’s most recent survey, 83 percent of CIOs have enabled wireless access to e-mail. Emboldened by the success of these projects and the decreased cost of wireless, almost 10 percent of CIOs are starting to pursue data-intensive wireless projects, such as access to CRM and ERP systems. While many of these projects are in the beta or pilot stages, the success of the

trials, as well as the continued success of wireless e-mail, are proving that you don’t have to be a transportation or package-delivery company to do wireless. Here are three stories from the front lines.

An Inexpensive Way to Put Data in Real Estate Brokers’ Hands

CBRE is the largest commercial real estate company in the world, with more than 10,000 listings. Every day brokers come into the office first and then go out to meet clients and show properties. A year and a half ago, CIO Steve Sutherland decided that it was time to let these brokers and other employees have wireless e-mail access. After piloting the project with members of the executive team, he made

CBRE

Business: Commercial real estate

Why wireless: Gives more data access to property brokers in the field

What they’re doing: Making real estate listings available to handhelds via e-mail

Obstacles overcome: Poor quality of service from using e-mail to deliver database query results

Expected benefits: Increased sales

wireless e-mail available to any employee who was willing to buy a Goodlink device. So far, 500 people out of a potential pool of 14,000 have bought devices, and Sutherland expects adoption to skyrocket this year. It helps keep people in touch with clients, though he is realistic about the benefits. "It still takes 10 minutes to do 10 minutes of e-mail," he says.

What would really help productivity, Sutherland thought, would be to give brokers access to the property listing database. He recently did that for seven offices in New York, New Jersey and Connecticut, and it has had a dramatic effect on brokers' ability to do their jobs. For example, a client may have made an appointment to look at 5,000-square-foot office spaces, and the broker meets him with a list of properties that fit the description. Now, if after looking at the first property the client realizes that he needs 10,000 square feet, rather than rescheduling for the next day, the broker can simply use his device to access a list of appropriate properties in the area. So far, the application has about 100 users. This is a project that Sutherland has wanted to do ever since he first became CIO in 1994, but until now cost-effective technology wasn't available. Now, he says, "the barriers to entry are gone."

Providing access to a back-end system, such as the property database, is more complicated than access to e-mail. E-mail requires only that the end device be connected to the Internet for a moment; the messages are downloaded to the user's device and accessed regardless of online status. Web-based applications, on the other hand, require a persistent connection. Even though coverage has gotten better, the risk of a transmission getting dropped is too real to simply extend core applications to wireless devices through browsers. In order to extend an application to devices, CIOs need to design it in such a way that it doesn't require a constant connection. Sutherland bought a development tool from Good Technology that allows the broker accessing the property database to initiate a search while connected and then have the results delivered in an e-mail.

Sutherland eventually plans to roll out access to the property database to CBRE brokers all over the United States. Right now, each regional office has its own database, a leftover system from hurried Y2K preparations. He is in the process of replacing those systems with a nationwide PeopleSoft implementation, which will be accessible by any employee.

Sutherland says that the project cost only "a few thousand dollars" for software, since employees have to buy their own devices and pay

for their own service time, and he used an existing server. The agents' increased efficiency more than justifies the expense, he says.

Hospital Massages Existing Networks to Fill Doctors' Wireless Order

One of the first things that Children's Hospital of Orange County (Calif.) Vice President and CIO Mark Headland did when he started his job two and a half years ago was ask doctors what they wanted most. Remote data access was the near unanimous answer.

Since then, Headland has met that challenge, and the hospital's wireless LAN allows high-speed data transmissions. "I don't think wireless is a question anymore," he says. "If you take your time doing good design, there is no question about the efficacy. The biggest issue for us is the device."

Headland has tried a variety of devices to improve patient care—the hard part, he says, is finding the right



Mark Headland, CIO at Children's Hospital of Orange County, says his biggest problem is finding enough computing power to serve all his wireless devices.

CHILDREN'S HOSPITAL OF ORANGE COUNTY

Business: Hospital

Why wireless: Meets user demand for flexible data access

What they're doing: Wireless network access for doctors and nurses

Obstacles overcome: Spotty network performance

Expected benefits: Improved patient care, more productive staff

Wireless Applications

device. In July, nurses will use laptops on carts and tablet PCs to record patient vital signs. Next will be giving doctors Ipaqs that they can use to access the latest patient data and lab results, and to place orders for medication.

The Ipaq project has created some challenges, however. When the doctor enters a patient's room, he hits the sync button, and during the next two and a half minutes, the latest data is delivered through the wireless network from the back-end database. The problem is that synchronizing, especially when more than one doctor is syncing at a time (Headland says it's conceivable that 30 or 40 could need to sync at once), creates a strain on the hospital's servers, sucking CPU power and essentially freezing all the networked computers for about a minute. As a result, Headland hasn't been able to move the Ipaqs into production yet.

The solution requires changes to both the mobile application and the database. Both were initially designed to deliver data all at once, and now have to be redesigned to deliver data piecemeal. These aren't complicated changes, according to Headland, but they do take some tinkering. And because these applications are intended for a hospital, the Ipaqs will need to be tested meticulously to ensure that they won't strain other medical systems. Headland is testing the Ipaqs in a mock environment and plans to go live with the project in March.

The wireless system at the hospital isn't going to have a hard ROI in dollars, but it should improve patient care. Doctors and nurses will be able to make decisions with up-to-the-minute information, and because doctors can place orders for tests in the middle of a visit, patients will receive treatment faster.

Systems Reseller Finds Right Device After Years of Tinkering

Optimus Solutions Director of IT Steve McDonald has been trying wireless projects for years, and until recently, his efforts have resulted in only a long list of failures. "I was caught up in the hype," he acknowledges. Optimus, which resells software and hardware and does consulting work, has a mobile sales force. Like many CIOs, McDonald felt that getting data to these people where they work had great appeal, and so he sought

OPTIMUS SOLUTIONS

Business: Software and consulting

Why wireless: Keeps sales force in contact

What they're doing: Wireless access to e-mail and calendar

Obstacles overcome: Short battery life, lack of wide area network access

Expected benefits: Competitive advantage



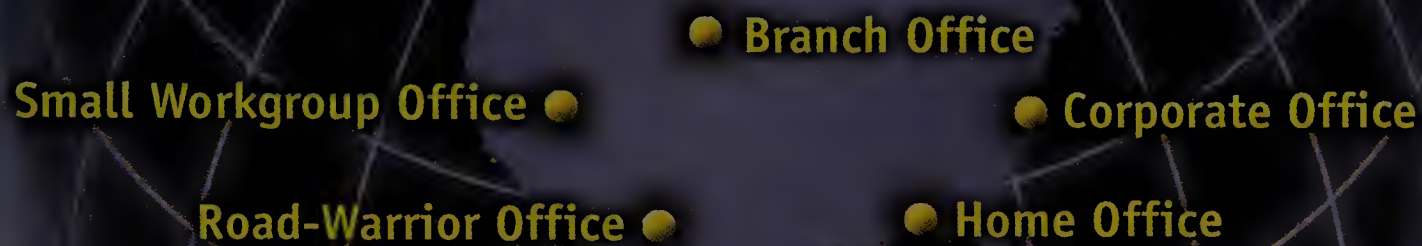
Optimus Solutions IT Director Steve McDonald found that a lightweight combination PDA-phone, with its decent battery life, is the best tool for his users' remote data access.

to make data from the company's homegrown CRM system available through wireless. The project wasn't mission critical, however, and wasn't worth the money it would have taken to create a customized device over a private network. So McDonald has spent the past three years experimenting with off-the-shelf technology.

His earlier attempts involved outfitting Palms and Pocket PCs with wireless modems that could access cellular networks. It was easy to make the application accessible to these devices, he says. The hard part was getting the devices to work. For starters, connection speed was limited to 14.4Kbps, which frustrated the sales reps trying to get data. The ones who weren't frustrated by slow connections were annoyed by the bulkiness of the devices. Between the modem and the battery pack necessary to keep them going more than two hours, they looked like and weighed about as much as a brick. Rather than lug around the devices, sales reps simply used their phones to call other reps in the office.

When the first combo PDA-phone devices came out three years ago, McDonald thought he had the answer—only one device to carry around would mean his users wouldn't be weighed down. But battery life was

PHOTO BY DAVID STUART



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a problem. The new devices—especially the ones that used color screens—didn't last more than a few hours unless the user was diligent about recharging, which most weren't. Worse, when the battery died, all the information on the device was wiped out. "You could back it up or recover the information, but that solution created a much bigger problem," says McDonald. For a while he abandoned his wireless ambitions.

In the past six months, his efforts have been reinvigorated, he says. The triggering event was the ability to use BlackBerry PDA-phones over cellular networks (until recently, BlackBerrys worked with only a handful of third-party data service providers approved by the vendor Research In Motion, or RIM). The new devices have a color screen and batteries that last up to five days. More important, they work with almost all the major U.S. cellular carriers. McDonald says that employees buy their own devices and that the company pays for usage—including the data transfer—though its wireless carrier.

Meanwhile, the ROI has been immediate. Optimus's sales force sells hardware as a commodity—they'll get a request from a customer who urgently needs a piece of equipment, and if that customer doesn't hear back within a few minutes, he finds another dealer. In the first couple of weeks of the three-person beta testing, Optimus landed four deals that it wouldn't have

They've Come a Long Way

CIOs say that recent advances in devices, networks and applications have made available inexpensive off-the-shelf ingredients for wireless projects. Here's the rundown.

Devices: CIOs interviewed for this article say that improved devices is the biggest reason why they are now pursuing wireless. New devices are small, offer combo phone-PDAs, have color screens, better memory, faster processors and, most importantly, can stay on for several days before the batteries need to be recharged.

Networks: Until recently, remote wireless access was limited to satellites, proprietary networks or expensive low-bandwidth data connections from wireless carriers. Now, most wireless carriers are able to deliver IP packets (the small chunks that data messages are broken into) over the existing cellular networks, which improves coverage and lowers prices. Furthermore, bandwidth is increasing, with speeds expected to reach 160Kbps this year.

Applications: Still a hurdle. E-mail and calendar apps are easy to wirelessly enable because they don't require constant connectivity. Web-based applications, on the other hand, require a constant connection. Plus the screens on devices make desktoplike presentation unwieldy. These applications need to be designed with the presentation and connection ability of a device in mind. Also, most vendors are including wireless versions of their applications with future releases. —B.W.

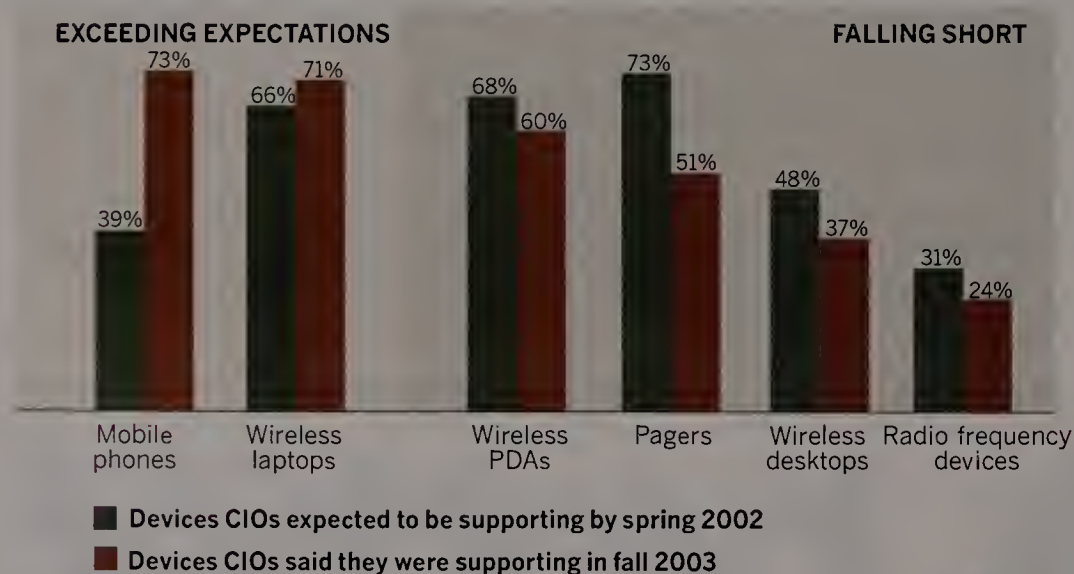
without the wireless project. McDonald rushed it into production at a development cost of only \$250 for each of the 60 salesmen.

Right now the employees are able to access the Lotus e-mail and calendar systems, but the success of the project has led McDonald to revisit CRM, which is housed in a Lotus Domino database. The project will move into beta testing at the end of the second quarter, and McDonald hopes to roll it out to the rest of the company by the summer. Before, he says, devices and networks couldn't handle what was asked of them. "Now they can," he says. **CIO**

Staff Writer Ben Worthen covers wireless technology for CIO. Send feedback to bworthen@cio.com.

Wireless Expectations, Wireless Realities

Comparing 2002 plans to 2003 projects, CIOs are supporting mobile phones to a greater extent than they expected

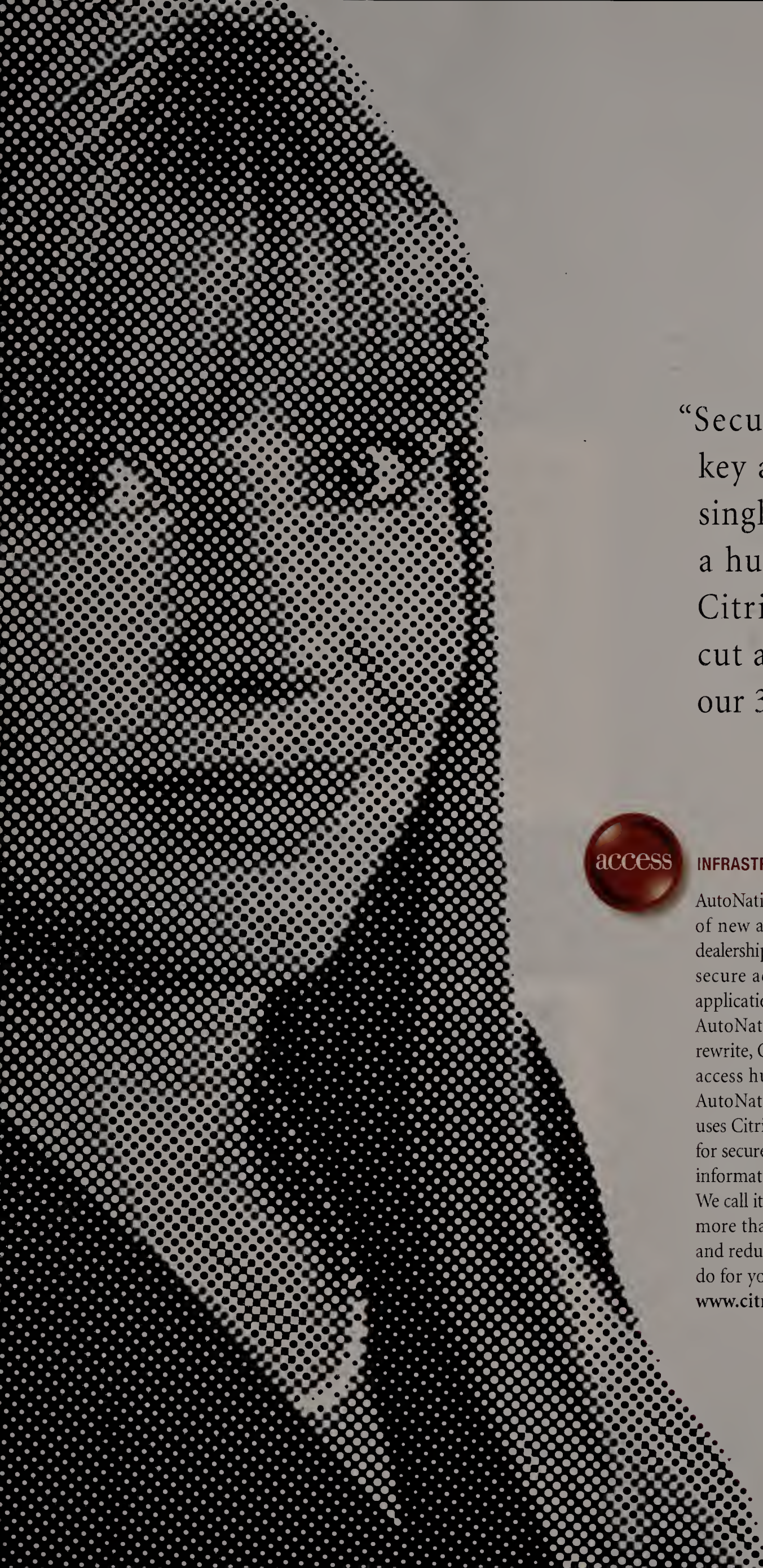


CIO RESEARCH

Get the Numbers

Every 18 months since 2000, we've pinned down IT executives on their perceptions and plans for wireless in the enterprise. To make your own comparisons over the years, or to check out where your peers are investing, see the full results of our most recent wireless survey, **THE PAYOFFS OF WIRELESS TECHNOLOGY INVESTMENTS**, at www2.cio.com/research.

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“Secure Web access to our key applications without a single rewrite was, by itself, a huge benefit from using Citrix. In addition, Citrix cut annual telecom costs at our 370 dealerships by 40%.”

Joyce Vonada, CIO
AutoNation, Inc.

access

INFRASTRUCTURE FOR THE ON-DEMAND ENTERPRISE

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Sweet Deals

Should you agree to be a vendor reference in return for preferential

Ethics (or the lack of it) in corporate America has become a daily drumbeat in the news. Financial giants such as Citigroup and Merrill Lynch are being investigated for helping Enron (and now Parmalat) assemble their pyramid schemes. Mutual fund companies are being investigated for market timing practices. Business journalists are increasingly alert to the relationships Wall Street analysts have with the companies they rate. But the quid pro quo of customer references, wherein technology vendors provide discounts and preferential treatment to CIOs

ROBERT URWILER, CIO, MACROMEDIA

A Win-Win for Customer and Vendor

Many vendors I've encountered have suggested that in return for better pricing or special consideration, I or others in my company be willing to provide references, participate in press releases, case studies or even talk to investors on their behalf. As CIO of Macromedia, a \$340 million software company, I believe that it is possible to entertain such propositions without crossing ethical boundaries as long as the rules of engagement are clearly defined.

First and foremost, I will not agree to be a guaranteed reference for anyone under any circumstances. Whether the vendor is a Fortune 500 supplier or a venture-funded "new idea," I always make it clear that being a reference is solely at my discretion. If I do agree to provide a reference because a product or service met or exceeded expectations, I also make it clear to the vendor that claims of success must not be embellished. In order to make sure that doesn't happen, I insist on the right to review and approve any use of our company name

Continued on Page 72

r Bitter Meals?

treatment? Two CIOs take opposing sides in this ongoing debate.

in return for good reviews, remains a flourishing practice.

Is this wise? Are there ways to get special consideration without crossing ethical boundaries?

Robert Urwiler, CIO of software company Macro-media, maintains that customer reference arrangements can be beneficial to all parties as long as certain rules are followed. Jerry Gregoire, former CIO of Dell and PepsiCo, disagrees, arguing that there's never a good reason to be a poster child in exchange for preferential treatment.

Which argument do you buy?

JERRY GREGOIRE, FORMER CIO, DELL

There's No Free Lunch (That You'd Want to Eat)

Advice is a dangerous gift. Give some and the best you can hope for is the other guy's natural tendency to ignore it. The next best thing you can hope for is that he never finds out you were motivated by anything but good intentions. That's a lotta' hopin'.

So, with that, here's a little advice.

You should never agree to endorse or demonstrate a vendor's product in exchange for anything—anything. Furthermore, you should never accept the endorsement of another CIO who has.

The reasons are simple: You don't have to, and you shouldn't want to.

Before I explain, it's worth observing that, in spite of the presenters' best efforts, all of the sales presentations you'll ever have to sit through are pretty much the same. There's the "Here's why you should buy" portion followed by the "Here's why you should buy now" part. At

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or brand in any collateral material, website, news release or case study. Depending on the vendor and the situation, my company formalizes such agreements contractually.

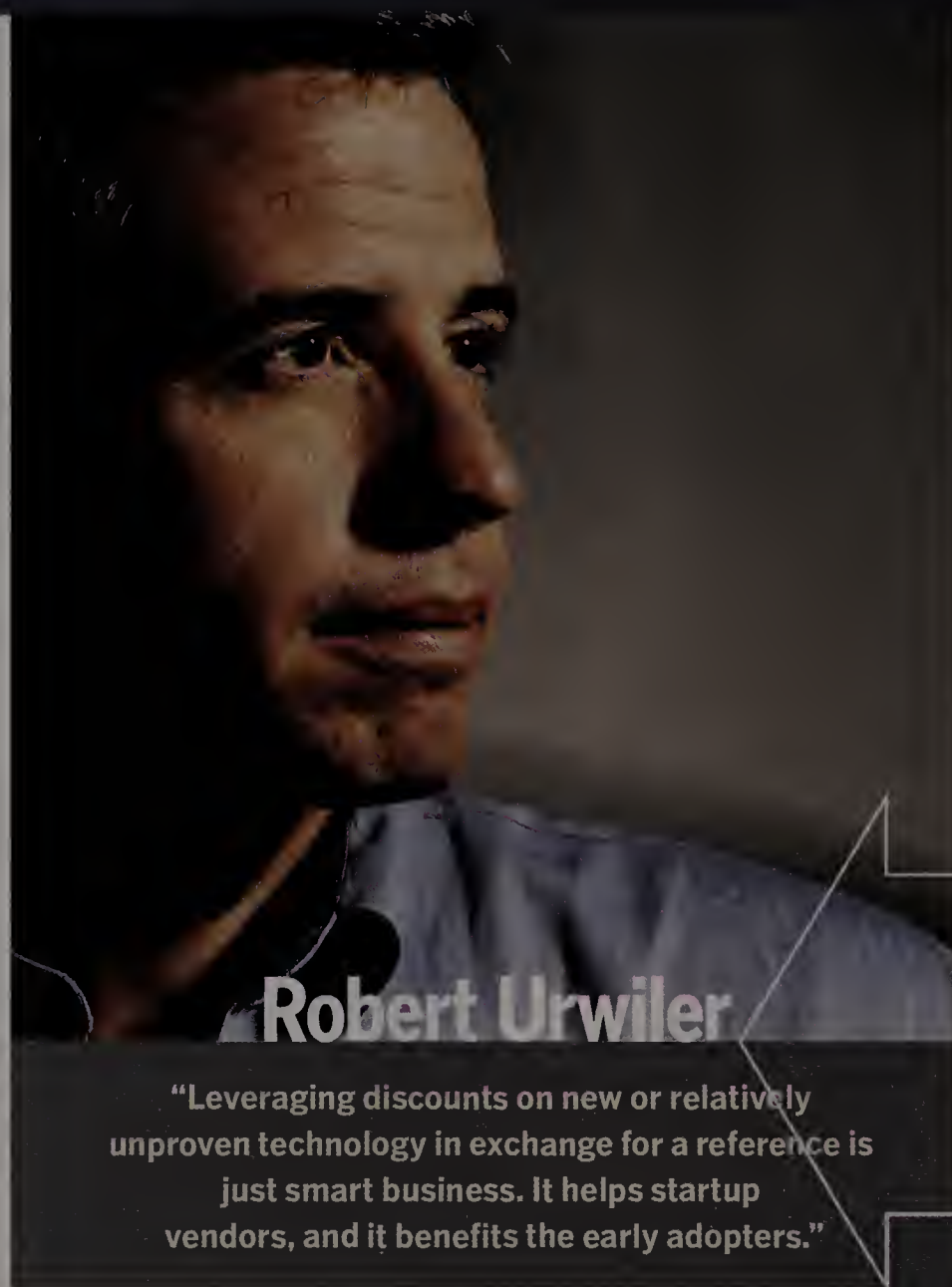
On occasions when we enter into special arrangements with vendors related to early adoption of a new product or a significant unproven upgrade, we insist on some unique rules. For example, I was recently introduced to the management team of a new company in the business intelligence space through my involvement in a CIO consortium. After the team came in to pitch the company's value proposition and capabilities, we were interested in testing its new approach to analytics. After some negotiation, they offered a tightly scoped pilot project, several perpetual licenses and perpetual support on those licenses at an unbelievably low cost. Because the company is a startup and has very few real customers at this point, we've received an incredible amount of attention from it at all levels. As of this writing, we are two months into the pilot and quite impressed with the software. We have agreed to act as a reference on the condition that we are satisfied with the pilot.

Why Customer References Are Good for Business

These types of relationships can result in win-win situations. In my opinion, leveraging discounts on new or relatively unproven technology in exchange for a reference is just smart business. It helps startup vendors, and it benefits the early adopters.

We often take the same approach with larger and more established companies. Do I think I deserve a deep discount or special support attention for being an early adopter of a new and substantial upgrade or release? Of course. Am I willing to be a reference if it all works out well? Why not? The benefit applies both ways. Such an arrangement helps me achieve business value at a reduced cost, and I am happy to brag about it if it works.

When providing references, I would also be clear that special attention was received throughout the upgrade and would dis-



Robert Urwiler
"Leveraging discounts on new or relatively unproven technology in exchange for a reference is just smart business. It helps startup vendors, and it benefits the early adopters."

close any snags we hit along the way.

Advisory relationships and their effect on references should also be monitored very closely because of the naturally biased opinions of advisory board members. For example, I retained a telecommunications cost management company to audit past telecom bills, renegotiate telecom contracts, and manage the communications billing and reconciliation process. I began my relationship with this company on a very limited basis, but over time I became impressed with its business model and ability to save me money. When the CEO of the company decided to form a technology advisory board, he asked me to serve as a member. Because of my belief that aiding the company in this capacity could ultimately

enable it to serve us better, I accepted the invitation (after receiving approval from our CFO). Although this is an uncompensated position, I now feel obligated to inform all references of my relationship as an adviser prior to giving feedback. I've yet to run into anyone who felt I was misleading them for personal gain.

The Importance of Full Disclosure

CIOs interviewing references should always ask the question: What is your or your company's relationship with the vendor, and have you or your company been compensated or given preferential treatment in return for this reference? Additionally, you should ask about the reference's business relationship with the vendor. Is a partnership in place that would provide incentive for an embellished reference such as a reseller or OEM arrangement? That is, does additional business for the referenced company directly or indirectly benefit your company?

I recently visited with salespeople for a chip manufacturer who were touting the company's improvements in internal productivity and reduction in IT support costs due to its aggressive internal PC refresh program. I was naturally a bit skeptical. After all, the more a company refreshes PC technology, the more chips it sells, right? It is absolutely

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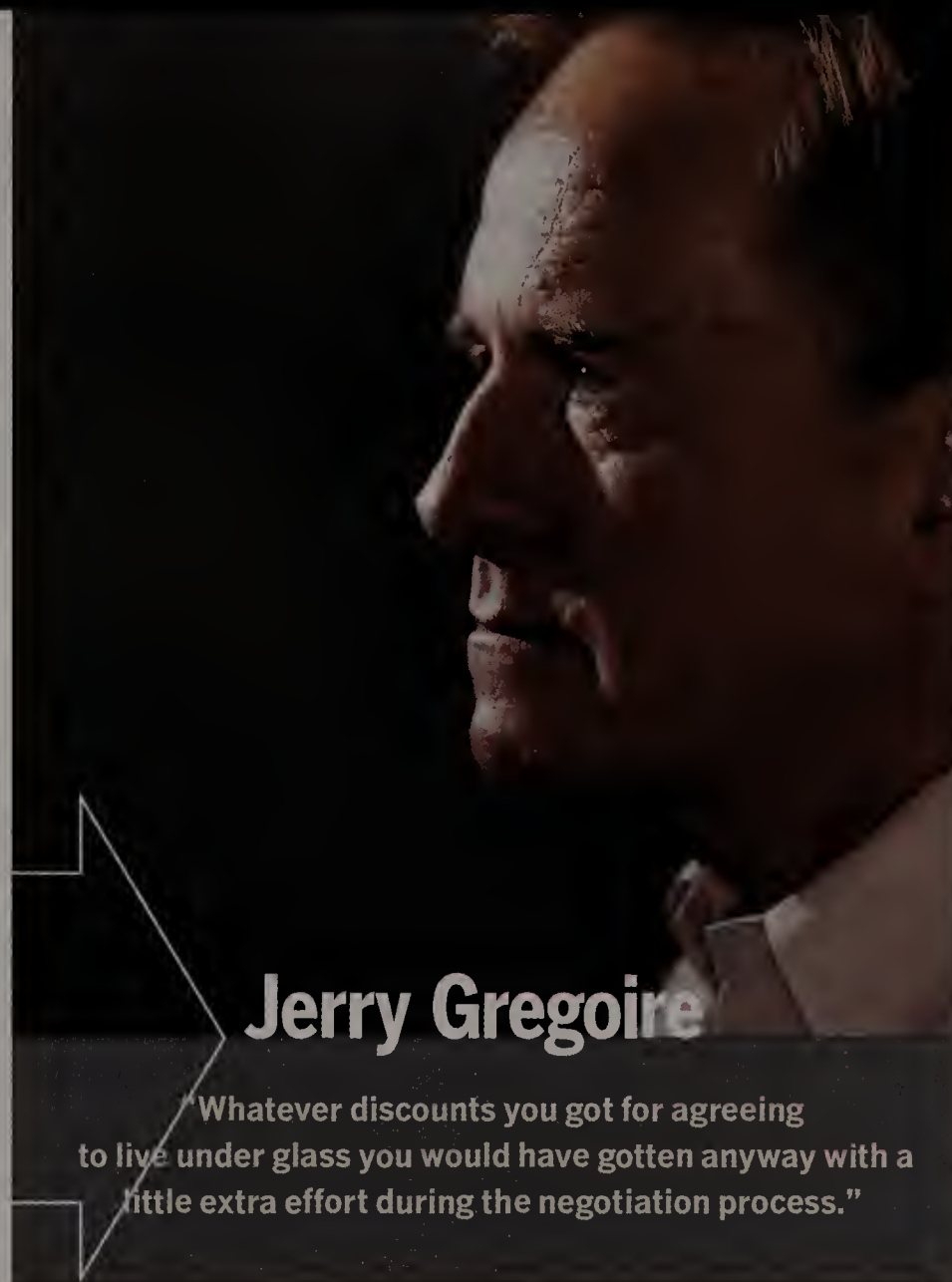
Continued from Page 71

the heart of the “buy now” argument is the depressingly accurate notion that mutual interest is a more important catalyst to agreement than logic. What these pitches, of which there are basically three, share is that they are all reasonable, logical and completely bogus. I gave each of these offers a name some years back. See if you recognize any of them.

First, and certainly the silliest, is the one called Send a Boy to Camp, where the vendor offers substantial discounts, services or whatever if you agree to sign a contract before some magical and imminent date, usually at its quarter or fiscal year-end. On a stack of Bibles, I swear we’ve had salespeople who confided that if they closed the sale quickly, they would win a trip to Las Vegas or Branson or somewhere else equally exotic. Breathtaking.

The second, called There Goes the Neighborhood, is where the vendor in question reveals to you that all of your competitors have either purchased or are about to purchase its product. Now, to most really good IT departments this would seem like a compelling reason *not* to buy and a golden opportunity to create some differentiation, but by definition half of the IT departments out there are below average (present readership excluded, of course).

And the third pitch, called Tin Men, is the most transparent, potentially most dangerous offer and, worse, the one that requires you give up something in addition to your money. The Tin Men pitch got its name from the Barry Levinson movie of the same title. In it, there’s a scene where a couple of salesmen are taking photographs of a house. The woman of the house comes out to ask what they’re doing. “Taking before and after pictures for *Life* magazine,” they tell her. She’s very excited until she learns her house is to be the before photo and a neighbor’s house is to be the after. Of course, if she’s willing to have her house aluminum-sided (for only the cost of labor and materials), then her home could be used for the after picture. Get it?



Jerry Gregoire

“Whatever discounts you got for agreeing to live under glass you would have gotten anyway with a little extra effort during the negotiation process.”

The high-tech version of this scam is, of course, taking software, hardware or services at a “discount” in return for offering yourself as a reference and your company as the neighborhood showplace. Which, finally, brings us back to why this is a bad idea.

What’s Good for Them Ain’t Necessarily Good for You

Let’s start with the “You don’t have to.”

You should take it as a matter of faith that whatever discounts you got for agreeing to live under glass you would have gotten anyway with a little extra effort during the negotiation process. Think of it this way: Large, successful vendors don’t give away products and services

for any reason, which is why they’re large and successful. Startups willing to give away products and services in exchange for a reference simply won’t be around very long, and that represents a whole different set of problems for the long-term success of your project. Furthermore, no vendor—large or small—is going to walk away from a deal it can make some money on, particularly if a competitor is waiting close by. It just isn’t going to happen.

Now for the “You shouldn’t want to.” Quick, take out a piece of paper and make a list of all the reasons, besides raw ego or some misguided notion that a vendor might be nicer to you after the sale, that it’s a good idea to shill for one of your vendors. Pretty short list, huh?

As a practical matter, being a showplace for somebody else’s software, for example, implies that the software is either new or new for your industry. It’s an irrefutable fact that new software, or old software being adapted for new applications, simply doesn’t work well early on. Hell, you can write your own applications that don’t work for half the price. That’s not to say that it isn’t a good idea to team up with a vendor to create some competitive advantage for your company. It’s just that after all the pain and suffering to make the

Continued on Page 74

Urwiler *Continued from Page 72*

important to understand the motive of the individual providing the reference. I'm certainly not accusing the chip maker of spreading untruths; I'm simply putting the feedback in context.

I've noticed that since the dotcom meltdown, reporters on financial news TV shows seem to make a point of asking analysts about their relationship with the companies they are recommending. In hindsight, it seems like it should have always been an obvious question, doesn't it? CIOs, in my opinion, have an obliga-

tion to each other to provide truthful references while being honest about the nature of their business relationships. Whether the vendor is an established business partner or a venture-funded startup, CIOs should never compromise what should be considered among the core values of the profession. ■

Robert Urwiler is CIO of Macromedia, a San Francisco-based company that provides software including Flash and Dreamweaver. He can be reached at cio@macromedia.com.

Gregoire *Continued from Page 73*

applications work, do you really want to help the vendor sell *your* work to your competitors? If the work you and the vendor have done is good, it will probably happen anyway, but why facilitate it?

Your Reputation: A Pearl Beyond Price

The second practical consideration is that reputation for integrity you've spent so many years securing for yourself. We've got a policy here on the ranch that we never sell a used piece of equipment or a used car to someone we know or are liable to run into again. Not because there's something wrong with the equipment (besides the fact that it's old), but because we will have no control over how it's being used or cared for. You've got the same problem every time you speak to your colleagues on behalf of a vendor.

You have no control over how that vendor might treat the next customer, but be assured you will shoulder a certain amount of the blame if things don't go well, particularly if it's known that you've been compensated in some way.

To complicate matters further, not all the compensation CIOs receive comes in the form of discounts or services. It's pretty common for CIOs of large corporations to sit on the advisory boards of software and hardware vendors and not at all uncommon for CIOs to be members of

Urwiler (above) and Gregoire agree on one thing: CIOs have an obligation to each other to be honest about the nature of their business relationships.

boards of directors of other high-tech concerns. Now, I believe that CIOs serving on boards is a wonderful thing. It's done a great deal to enhance the overall standing of our profession, and it's helped vendors improve their products and services. But compensation—something as small as a weekend of golf at a resort hotel all the way up to a regular board salary and stock options—is still compensation and automatically disqualifies you as a disinterested party in whatever sales pitch you might be dragged into.

I've been pretty critical in the past of the astonishing shenanigans the vendors in our industry have been able to get away with. We CIOs have ourselves to blame, in part because we've not been more direct with each other about the problems. So on those occasions when a vendor delivers a great product when

promised, or does an otherwise superior job of fixing problems and providing service, it would be nice to know that the messenger wasn't getting his axle greased. **CIO**

Learn More About Referencing

Still on the fence about which side to take on customer references? We listed five reasons not to trust them—and five ways to get value from them—in our August 2002 article **The Truth About Customer References**. Find the link at www.cio.com/printlinks.

CIO.com

Jerry Gregoire is a former CIO at Dell and PepsiCo. Today he serves on the boards of various high-tech companies and herds cattle on his ranch outside Austin, Texas. Occasionally he'll stop to read his e-mail at jerry_gregoire@mindspring.com.

Which argument do you buy? Tell Executive Editor Alison Bass at abass@cio.com.

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Sound Off

Taking Sides on Critical IT Issues

Will Technology Make Us a Nation of Unemployed?

BY ART JAHNKE

REMEMBER, NOT SO LONG AGO, when people used to talk about the turnaround in the IT job market that would arrive in the first quarter of 2003? Some of those people are still talking about a first-quarter turnaround, but now they mean the first quarter of 2004. There are many predictions circulating about when the IT job market will rebound and the shape that the industry will take once it emerges from its deep sleep. Although it's impossible to know what to expect in the future, most are now in agreement that the industry won't be returning to boom times anytime soon.

In mid-2003, the American Electronics Association released its annual assessment of the high-tech job market, and the news was not good: The technology segment dumped 560,000 high-tech workers in the past two years.

Most of those workers, analysts agree, were dumped for one of two reasons: Their employers could afford to dump them, or their employers could not afford not to dump them.

William T. Archey, president and CEO of the group that sponsored the study, regards the two reasons as two views of the same situation. Archey points out that the lion's share of jobs lost (415,000 of the 560,000) came from the high-tech manufac-



turing sector, where businesses have enjoyed the benefits of new technology. One of those benefits, he reminds us, is a reduction in the number of workers needed to meet production demands.

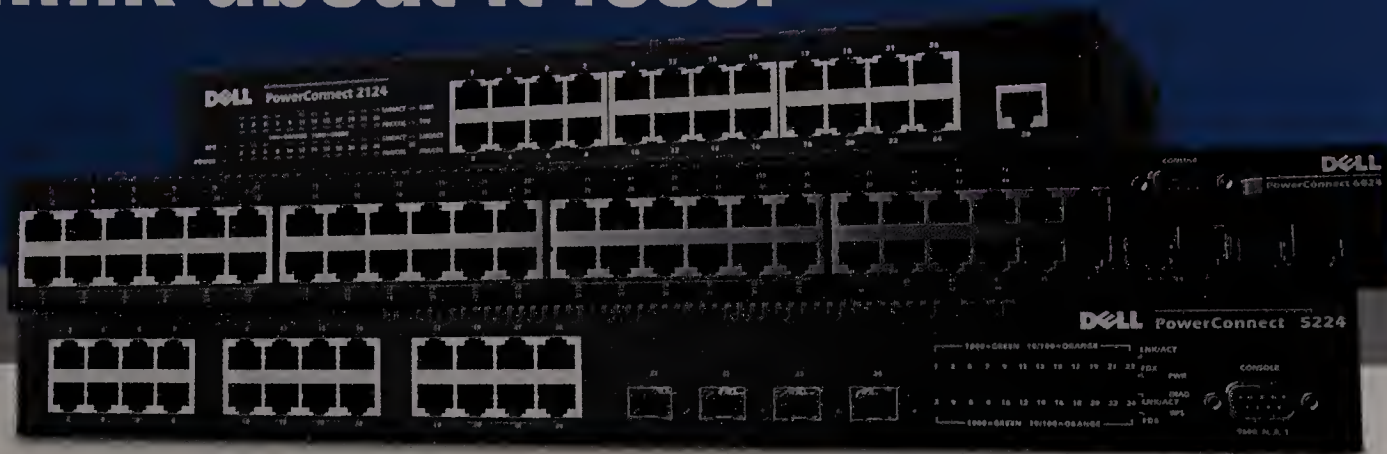
"That's one of the paradoxes of this whole situation," says Archey. "Technology has made the manufacturing dramatically more productive. Five years ago it may have taken three people to make a cell phone, and now it takes one." It's a paradox that presents a problem, and it's a problem that appears to have no solution, Archey says.

Is the president of the American Electronics Association right? Will technological progress continue to reduce the need for technology workers? Or can the technology industry save itself from its own success? Got a solution? Tell us what it is.

Sound Off is a weekly online column about current IT-related issues written by Web Editorial Director Art Jahnke. Find the column at comment.cio.com.

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Sound Off

I DON'T SEE WHY ANYONE WOULD THINK THAT THE introduction of new technology would be a threat to technology jobs. Jobs can and will change over time. They do so much faster in the technology field than they do in other fields, but the overall number of jobs only increases as the technology becomes more complex.

Tech professionals have to constantly work on their IT competencies and be willing to continuously upgrade their skills. By that I mean that IT professionals need to develop the people skills that enable them to deliver technology in an understandable manner, and they need to refresh whatever skill sets (programming languages, network knowledge) needed to be useful. I don't see there ever being more than a very temporary shortage of IT jobs, and then only in a depressed economy or while the individual does a "skills refresh."

Bernard Doyle
CIO, EDO-AERA

OF COURSE THERE WAS SOME IRRATIONAL EXUBERANCE IN 2001. But don't blame IT—technology needn't eliminate work; it transforms work from routine and repeatable to dynamic and creative. But business leaders have to have the imagination to see that and the willingness to change. Generally they don't. IT workers are used to change as a way of life. We know that there are many human tasks that are neglected because many managers don't see the need for strategic change, they don't support R&D, and they don't fully utilize the technology that is already available. They only want to maximize quarterly earnings.

Paul Arveson
Director
Balanced Scorecard Institute

I CARE GREATLY ABOUT MY PEOPLE, BUT MY RESPONSIBILITY is ultimately to the organization I work for. If I cannot justify my staff, they must either retool and move into other positions—or find other jobs. Our goal must be to do more with less.

K. Cassel
CIO

LIKE ALL NEW IDEAS, THE MOVEMENT OF I.T. SERVICES TO offshore locations is viewed adversely, but in fact it is the competitive edge that would help the tech industry in the United States work out of its current situation. Leveraging lower cost of maintenance and manufacturing would enable the tech companies to lower their operational costs, hence prices, and open up a larger global customer base that, to date, has been untapped.

Undeniably, this would require tech workers to advance their

skills from executors to designers and managers. Movement up the value chain, like success, requires tenacity—and not all will succeed.

Vivek Khanna
Evangelist
Comsys

THE TECH INDUSTRY IS COMMITTING SUICIDE. AN INDUSTRY the size of the tech industry could generate its own recovery if the high-tech companies simply bought high-tech themselves. The reality is that executives in high-tech have curtailed spending to the point of committing themselves and the industry to a slow and painful death. It's amazing to me that the very people complaining about the economic situation are the same ones who could bust things open simply by spending and upgrading technology. With the downfall of the Internet, it seems we went completely belly up, and our inaction will be what kills technology. I have a novel idea: How about all the high-tech companies upgrade their technology now instead of waiting. You know, be leaders and quit aspiring to a norm that won't change unless they decide to change it. The key is and always will be leadership, and right now, I see no leader willing to be the catalyst to get things moving. Any takers out there?

Bill Long
Manager
Hewlett-Packard

THE TECH INDUSTRY IS NEITHER AN INDUSTRY NOR IS IT ruled by technology. It is a loose amalgamation of niche players who are attempting to establish their standards over those of competitors. The measure of success remains market share.

From direct experience, I have concluded that any success this industry has seen has at times been coincidental due to the ingenuity and novelty of the technologies it has introduced during a time of economic expansion. We should not forget that those same high-tech employers that hired and then dumped 560,000 workers during the past two years did so in response to products that would not sell in markets that would not buy.

I have been involved in many senior management meetings with clients and employers during which valid negative risk-assessment reasons for not pursuing a particular market were downplayed due to the sales potential and to the perceived image value to the corporation.

The business maxim used to be, "If you build it, they will come." Today it has morphed into, "If you do build it, would anyone have the money to risk buying it?"

Anthony Paraskevas
Senior Consultant
Mi6 Marketing Intelligence

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From the Publisher

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A New Way to Depreciate

MY FATHER WAS A TAX EXECUTIVE for a New York City bank. After an hour of trying to decipher what the details of the Jobs and Growth Tax Relief Reconciliation Act of 2003 could mean for CIOs, I am glad I chose a career in tech publishing.

For CIOs, the bill offers key provisions intended to stimulate business investment by accelerating the first-year depreciation they can claim on certain assets purchased after May 5, 2003, and before Jan. 1, 2005, to 50 percent, up from the current level of 30 percent.

The qualified property list of those assets is long and eclectic. It includes off-road trucks, breeding hogs, taxis, private aircraft, copiers and, anachronistically, typewriters. And in the three-, five- and seven-year property depreciation category are items near and dear to the hearts and budgets of CIOs—namely, computers and peripheral equipment, computer-based equipment for telephone central office switching, cell phones and furniture.

What about software? That's in the bill too, but it is covered in a less straightforward manner than the previously mentioned items. The bill offers the 50 percent first-year depreciation allowance for off-the-shelf software, a category defined as software readily available for purchase by the general public. How-



Gary J. Beach

ever, if a CIO were considering the purchase of a CRM software package for deployment to all or a substantial part of the business, that software purchase would not qualify for the 50 percent write-off.

So it seems you could upgrade 1,000 seats of Microsoft Office and take the 50 percent accelerated-depreciation benefit because you could buy Office off the shelf at a retailer but not if you bought a major ERP package from SAP for your enterprise (after all, you couldn't purchase it at Wal-Mart).

One clever executive I spoke with asked this: Could a CIO take a 50 percent accelerated-depreciation charge if he bought Oracle 10g and rolled it out to a 10,000-employee division of a company of 100,000 employees? Hmm, good question. Would one-tenth of a firm's employee base be perceived as a "substantial" portion of the business?

If you have read this far, you are now at least aware of this one-year bonus opportunity. How does it apply to your company? Best to get on the phone with your company's tax attorney right away. It could be a great way to stretch tight budgets in 2004.

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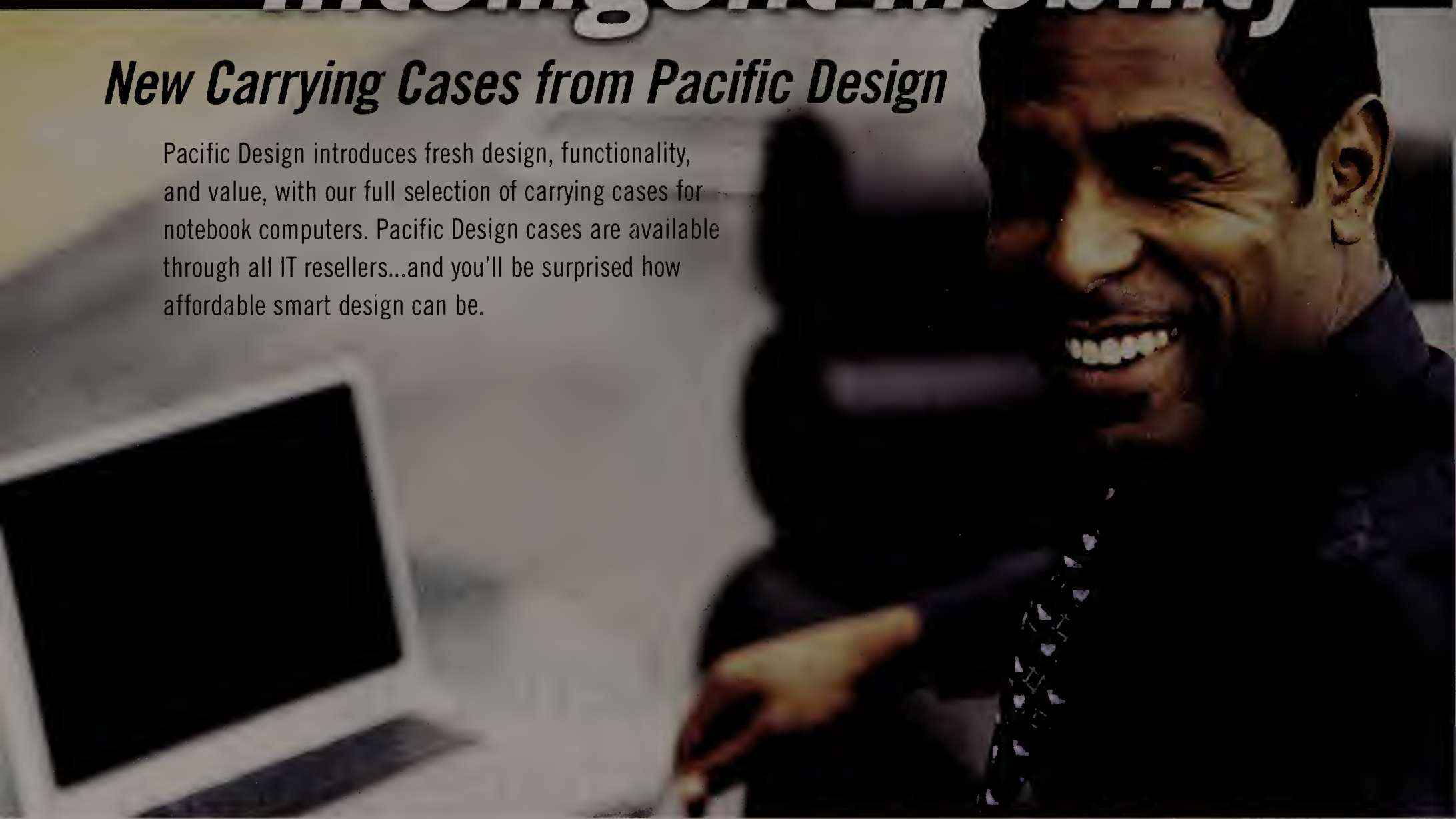


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Editor Edward Prewitt at
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Can't We All Just Get Along?

IT and business units at Novartis weren't talking to one another—until they started speaking a common language of leadership

BY STEPHANIE OVERBY

In the summer of 2002, the accounts payable department at Novartis Pharmaceuticals faced a full-fledged financial crisis. Somewhere in the computerized disbursement system, between invoices and checks, payments were being held up and a backlog of overdue bills was building. A few vendors even put a credit hold on Novartis Pharmaceuticals, which is the U.S. arm of Novartis AG, the \$23 billion Swiss pharmaceutical giant.

The Accounts Payable and Strategic Sourcing departments impugned IT—more specifically, a recent SAP upgrade to the R/3 financial modules. The message the business departments felt they were hearing from IT was: SAP is the Novartis global standard, like it or lump it. Frustrated, Accounts Payable and Strategic Sourcing began meeting—without the IT group—to figure out a way to reengineer their requisition-to-pay process and perhaps even scrap the new SAP modules that didn't meet their needs.

On the other side of the corporate campus in East Hanover, N.J., IT executives knew the unpaid invoices were not completely the fault of the SAP upgrade. The existing process for invoices was inefficient, requiring manual approvals by too many managers. The IT group had recently launched an effort to improve its alignment with business partners by appointing business information managers (BIMs) to clarify and support business goals. Nonetheless, the finance BIM felt frozen out of the meetings held by the fed-up business community to settle on a new solution.

It's an age-old story: An IT project starts out with high expectations and involvement from the business. But as the

project progresses, it becomes clear that the two sides have different needs and constraints. Under the strain of time lines and tight budgets, communication is inadequate. Business units blame the IT department, and IT feels insulted and



misunderstood. Both factions grow increasingly suspicious and self-protective. Project tanks.

And that's how the situation at Novartis probably would have played out. "It was a train wreck waiting to happen," says Jose Ramirez, Novartis's vice president of IT for finance and supply chain. "We would have continued to have political problems, along with a proposal by the business that didn't have buy-in from IT. It would have come to a head at some point."

Instead, Ray Pawlicki, Novartis's vice president for IT and CIO, effected an intervention: He invited all parties involved to a six-month program to create a joint leadership approach. It was a long shot, but it

Hot Seat

worked. And it helped answer the looming question at Novartis, and among many business and technology units everywhere: Why can't we all just get along?

When the IT Solution Is Part of the Problem

The billing problem was actually straightforward. "There wasn't a true requisition-to-pay process," says David Galbraith, director of business process design, who was brought in to help solve the problem. "The company was structured in silos. No one knew what was going on."

The IT department thought it had a solution in the SAP R/3 implementation. "The mantra was, Let's put everything we can in SAP so we have fewer interfaces,"

back together, but it didn't work.

A potential solution came from an unexpected source. The head of Accounts Payable, while serving as a liaison to IT in a previous role, had participated in a training program called the Language of Leadership. Pawlicki had previously used this program solely for IT staffers. But when the Accounts Payable chief encouraged Pawlicki to apply the Language of Leadership to breaking the barrier between IT and the business units, the CIO invited all employees involved to a joint program.

The Ontology of IT

A philosopher, a psychologist and a businessman walk into a conference room.... It sounds like the beginning of a joke, but actually it's how the six-month Language of Leadership sessions kick off.



"People within IT were saying to the business, Yeah, we know what you want to do, and this is where we'll stick it in SAP. And the business was saying, But, but, but.... And there was the rub."

—Ray Pawlicki, VP for IT and CIO, Novartis

says Pawlicki. "People within IT were saying to the business, Yeah, we know what you want to do, and this is where we'll stick it in SAP. And the business was saying, But, but, but.... And there was the rub." Because of the tight time line and budget of the financial modules implementation, IT scrimped on training and all but ignored the new system's impact on business process, says Ramirez.

But when the IT group got wind that Accounts Payable and Strategic Sourcing were meeting privately to reexamine the req-to-pay process and the IT system to support it, they grew very resentful. Other IT finance projects took on the same bitter flavor, says Ramirez, and IT morale suffered. Senior managers from IT and the business departments met or talked weekly to try to bring the estranged departments

Pawlicki had previously offered this training, led by trainers from SDI Communications, to his top 50 IT leaders as a way to improve their listening and collaboration skills. This time was different. "We decided to try something new and help these individuals not only evolve as leaders but also to agree on a strategic outcome: to have this project be the best project ever undertaken within Novartis," he says. A lofty goal, to be sure, but it was what the Language of Leadership concept was all about—creating leaders who could commit to meeting grand, strategic outcomes.

Initially, though, attendees weren't buying it. The sessions included ontological discussions on how individuals could improve their leadership not by changing what they did but by changing

their fundamental "way of being." "I thought, These people are from a different planet," says Ramirez. "They're talking about a different way of being. I was confused."

"We were skeptical," agrees Galbraith, the business process design director. "We thought our own project methodology was sound and were afraid to say there

COMMUNICATION BREAKTHROUGH

First, Look in the Mirror

Novartis Pharmaceuticals used the Language of Leadership program, developed by SDI Communications, to overcome mistrust between IT and business units. But is it really necessary to change one's "way of being" to get to agreement?

Here's what SDI has to say: People tend to think that for a breakthrough to occur, someone else needs to change. But the real problem often lies how they themselves are behaving. For example, a manager might say his counterpart doesn't listen. But he must work on his own listening—his way of being—before expecting others to hear him.

—S.O.

might be another way to go about things. Besides, it sounded a little too soft." Could the metaphysical have any place in the management of a multidepartmental corporate project?

During the first two-day sessions (out of a total of four over several months), the program trainers asked the business professionals what they thought of IT, and vice versa. On the first go-round, the answers were pretty polite. But "[the trainers] were grinding," says Galbraith. "They didn't let us get away with that." By the third round of the same question,

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Hot Seat

people got brutally honest. The business said about IT: They're too bureaucratic, they don't care about the business, they only

care about standards. IT said of the business: They don't trust us, they're secretive, they have no understanding of what it takes to get things done.

At the end of the session, Ramirez found it hard to look his business counterparts in the eye when leaving the room. "We got a load off our chests, but it was awkward," he says.

Over time, this clearing of the air had the desired effect: People from both sides began really listening to each other and, eventually, sympathizing. The trainers had them practice taking a stand for the other side's concerns. "The focus was on being committed. Compliance was not tolerated," says Pawlicki. "And that had been the sense with the req-to-pay project: Some parties were just being compliant—not committed to making it a huge success."

Ultimately the Language of Leadership participants were able to commit to two strategic outcomes that went beyond their preconceived notions of each other and what was possible. One was general: Create a new way for IT, Accounts Payable and Strategic Sourcing to work together that would enable rapid business transformation. The other attacked the problem at hand: Improve the buying experience for Novartis departments so that they would no longer make independent purchases, and instead would channel all their requisitions through Strategic Sourcing. This centralization of purchases would increase Strategic Sourcing's leverage in buying to the tune of \$4 million to \$5 million in annual savings.

We Can All Get Along

The Language for Leadership training had a surprising effect on the req-to-pay

MANAGEMENT REPORTS Rx for Painless Change

How to avoid repetitive change syndrome

Repetitive change syndrome: that sinking feeling afflicting your employees when you or other members of the executive team announce yet another audacious change initiative. According to Eric Abrahamson, a professor at Columbia Business School, repetitive change syndrome runs rampant in organizations.

Abrahamson is the author of *Change Without Pain: How Managers Can Overcome Initiative Overload, Organizational Chaos, and Employee Burnout* (Harvard Business School Press, 2004). His point is that companies need change in order to thrive, but too much change without enough forethought can send an organization spiraling into turmoil. In organizations suffering from repetitive change syndrome, he writes, "so many waves of initiatives have washed through the organization that hardly anyone knows which change they're implementing or why." The result is frustrated, burned-out employees who resist change rather than embrace it.

The problem stems in part from managers' eagerness to buy into an approach called creative destruction, which encourages organizations to institute large-scale, disruptive changes—essentially breaking down the company in order to build it up again. While Abrahamson admits that creative destruction has its place in certain settings, he suggests that it's time-consuming, expensive and stressful, and that too many companies blindly pursue it to their detriment.

Instead, he suggests something he calls creative recombination, which involves customizing and reusing resources—people, processes, even computer networks—that an organization already

has. As an example, he points to Westland Helicopters, a division of GKN, which, in moving from a military market to a civilian market, nearly drowned in waves of creative destruction. When executives discovered how to recombine existing resources, by reusing product development models and siphoning some knowledge from employees from other divisions, the company was able to achieve the economies of scale it was seeking.



But creative recombination on its own isn't enough, Abrahamson warns. Even companies that practice it judiciously will not be successful if they don't understand pacing—when and how often to initiate change. Here he makes an example of Sears, which began to falter in the late '80s and early '90s because of competition from stores such as Wal-Mart and Kmart. When Sears's new management instituted a turnaround, the rapid pace of change ended up inflicting greater damage than the competitors. Sears lost the balance between change and stability—and somewhere in that balance is where effective organizational transformation lives. —Meg Mitchell Moore

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process problem. The finance BIM ("Our new best friend," says Galbraith) and other IT folks, galvanized by a deeper appreciation

of the business requirements and how those matched up with SAP and other providers, ultimately agreed on what Accounts Payable and Strategic Sourcing had wanted all along: a best-of-breed solution. In May 2003, IT signed off on an upgrade to an old Ariba system that would automatically reconcile sourcing and accounts payable, reducing late payments.

Along with a couple of other changes implemented by IT and the business groups, the Ariba upgrade improved the internal buying process so much that the planned savings of \$4 million to \$5 million annually was within sight six months into the project.

It was a long way to travel to end up where the req-to-pay team initially started, but participants say the project would have never succeeded without the leadership sessions. It was not only IT that had a change of heart. The Accounts Payable and Strategic Sourcing staffers made a concerted effort to understand how the SAP team would hear their argument. "We had to present [the Ariba proposal] in a way that showed we understood where they were coming from, validating their very real concerns," Galbraith explains.

Novartis's experience with the Language of Leadership gives hope for changing the typical dynamic between IT and business units. "On a scale of one to 10, this project was probably headed for a six. There would have been rumblings, and eventually they would have worked things through," Pawlicki says. "This time they were all committed to making this a success." **CIO**

Send feedback on this article to hotseat@cio.com. Stephanie Overby (soverby@cio.com) is a senior writer at CIO.

Leadership Agenda BY SUSAN H. CRAMM

Charm School for CIOs

Why being nice is your foremost task



The first part of the year is a natural time for implementing organizational changes, and so a lot of CIOs are transitioning now to new positions. Some are switching companies; others are moving between divisions or into newly created divisional CIO roles. Regardless, the challenges revolve around how to make a good first impression and set the course for the future.

If you are transitioning to a new position, you may feel like a 12-year-old going to your first school dance—everyone seems to be watching you, and you just want to fit in. The good news is that fewer are watching than you think; the other executives are too wrapped up in themselves to give you more than a passing glance. The bad news is that it's not enough to just fit in. New executives are brought in to make things happen. You have only a few months to assess the current situation, get your game plan together and signal what you care about to the rest of the organization.

New CIOs need to keep this mantra top of mind: First be charming, then be tough. Before you dismiss charm as irrelevant to your role as an executive, remember that if your ultimate goal is influence, then job number one is to build relationships. Meanwhile, you can assess the situation for IT and formulate your plan of attack.

New CIOs are often greeted with closed arms. Breaking through requires emphasizing people over tasks—that is, charm. Spend time with your direct reports, influential executives and their staffs, intensive users of IT services, and the front line (employees who deal directly with customers). Discuss their agendas, objectives, concerns and suggestions. During these sessions, ask questions and take visible action to deliver short-term wins (for instance, resolve a service issue or ensure that a performance appraisal is written).

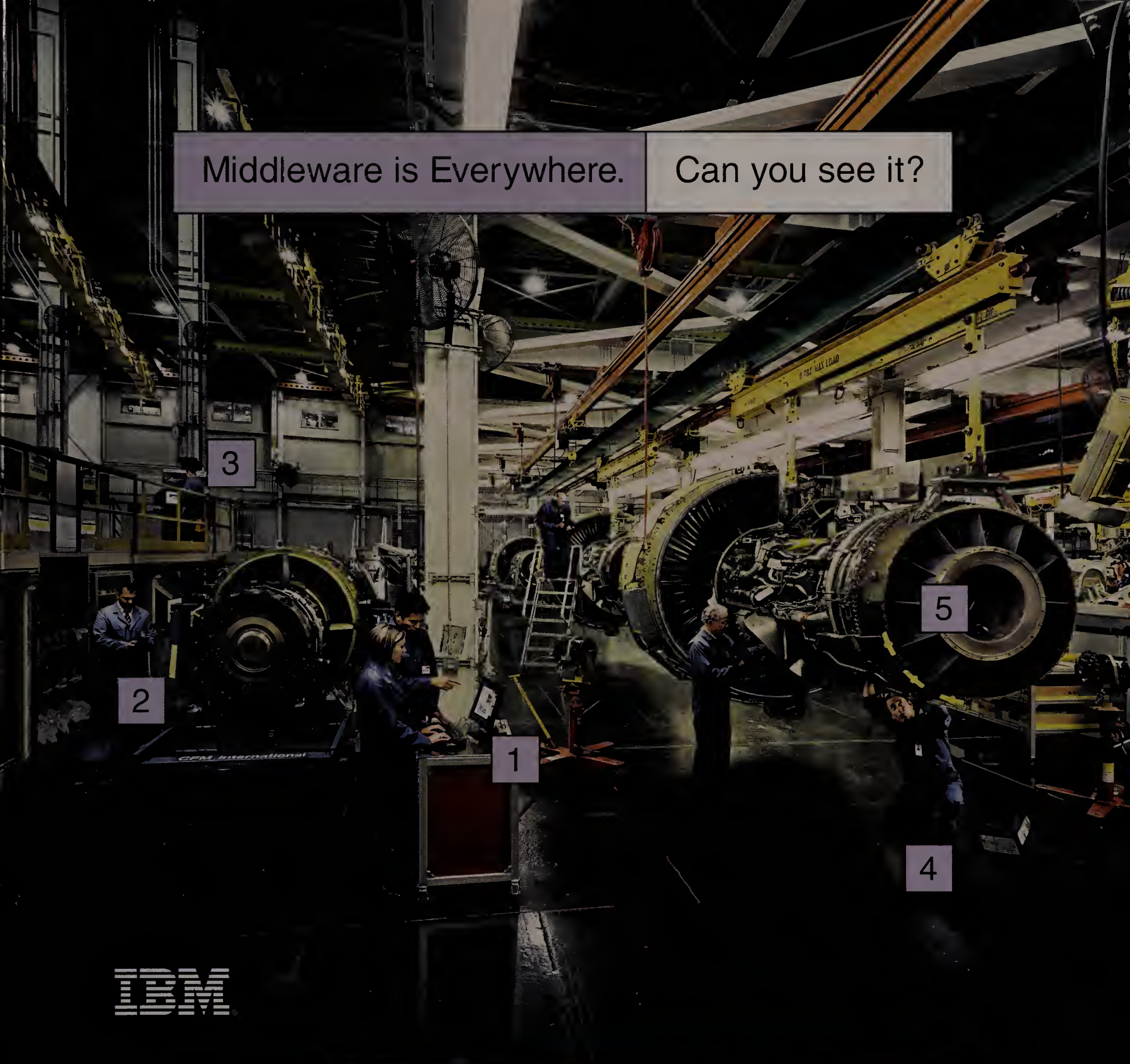
These face-to-face meetings accomplish more than building relationships and credibility. They also provide the information necessary to define your IT game plan—as long as you ask the right questions. Make sure that during your conversations with others, you are probing for insights in the following three areas:

- Where should IT investments occur?
- Is the organization capable of capitalizing on the potential of IT?
- Will the installed technical infrastructure stand in the way?

Investment opportunities are theoretically derived from an understanding of the industry, company financials, business strategy (explicit or inferred) and competitor positioning. But real-world IT investment opportunities are found at the intersection of business value and motivation. Practical investment requires filtering the theoretical opportunities through the motivation of

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the executives who are running the business and will be accountable for realizing value.

Determining whether the organization can capitalize on IT's potential requires understanding the track record of success (and root causes of failure), appropriateness of current investment levels, and ability to manage resources and projects. You must assess the strategic alignment, riskiness and health of current initiatives. Evaluating the technical infrastructure entails a review of the current technology footprint, operating costs, standards, and platform stability and scalability. You have to assess the infrastructure's fit with business needs, from both operating and strategic perspectives.

Your recommendations most likely will include changes to projects, technology, processes, resources and funding. Remember to define and stage your game plan to be consistent with the maturity of your IT capability and your organization's appetite for change. For example, it's impossible for IT to gain strategic positioning if core transaction systems are missing, data is fragmented and of poor quality, and the infrastructure is unstable. Remembering the "first be charming, then be tough" mantra, gain support for your game plan by soliciting input from critical stakeholders and presenting the concepts in a way that clearly demonstrates you are keeping their interests—and the enterprise's—on center stage.

Finally, as your tenure increases, change your mantra to "be charming and tough." The triple whammy of lack of time, resource constraints and rising expectations creates a mental pressure cooker that often results in CIOs behaving badly. This is usually manifested in decisions made without

adequate information and communicated using formal rather than informal channels. Charmless CIOs who rely solely on positional power and expert authority for their influence are the ones left without dance partners as they try to forward their agendas.

Reader Q&A

Susan H. Cramm answers questions on "Charm School for CIOs"

Q: How do I recognize the point when my mantra should change to "be charming and tough"?

A: First of all, let's define *tough*. Tough means making sure decisions are made in a win-win fashion. If you are getting pushed around, it means deploying the *Getting to Yes* techniques. Tough means asking questions that make people's principles surface, and getting beyond the typical requests that start with a preconceived solution.

As to the issue of timing, you can begin finding out about someone's principles only when you come to know the person and he knows you. Test yourself on what you know about people—their backgrounds, kids' names, hobbies, proudest accomplishments. Making sure they know you is easy—have a few informal meetings, demonstrate effort in getting to know their organization, and take care of them or their organization in some way.

Q: As a new CIO, I was once given a review in which my boss's big gripe about me was that I was too nice. He said people had to fear me and that I needed to execute (that is, fire) people who did not obey my every order. His management handbook was *The Art of War*. How do you respond to that mentality and way of thinking?

A: The fact that he referred to the *The*

Art of War isn't necessarily a problem; that book has a lot of valid points about how to approach difficult challenges and competitive situations. Unfortunately, your former boss interpreted the book as a treatise on how to do it to them before they do it to you.

If someone wants you to toughen up, you need to do three things. First, think about whether there's anything you really can learn from the feedback. Next, examine your language to make sure you are expressing yourself in a way that will be heard by your boss. Compare these phrasings, for example: "Before I manage him out, I will coach him to focus on developing the following skills," and "Before I get rid of him, I will hold his feet to the fire." Finally, at the end of the day, you must lead in a manner consistent with your values and personality. If your values and approaches are not consistent with those of your organization or superior, at some point your paths will part. Here's hoping that you take the high road!

Q: How can I handle a verbally abusive CEO, especially when the outbreaks occur in front of my IT staff and others?

A: If you are ready to stand up for your principles, talk with him in private. Don't take exception with the content of his comments, just the forum in which they are delivered. I have had to do this a couple of times myself. In both cases, the discussion went well because it was private and the people could tell it was a make-or-break issue for me. If you aren't ready to go that far, then limit the CEO's exposure to your staff if possible. **CIO**

To see more reader questions and answers from Susan H. Cramm, go to www.cio.com/leadership/agenda.html. Cramm is president of Valuedance, an executive coaching firm based in San Clemente, Calif. Her e-mail address is scramm@cox.net.

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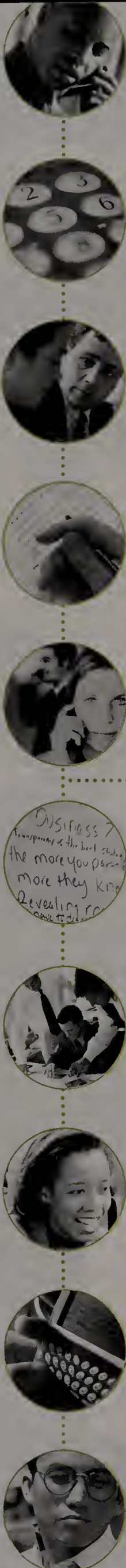
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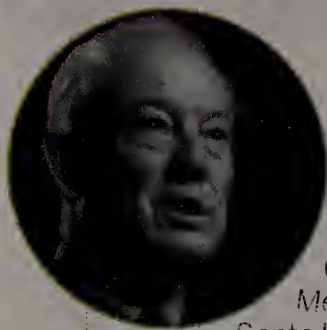


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Globalization touches all
organizations. What do your
policies say about your politics?

Corporate and Personal Ethics

The recent wave of business scandals
shows how far many have strayed from
ethical behavior and the concept of
moral courage. How do we bring back
these values?

Governance and Risk Management

How can your organization's
structure help ensure the safety of
your electronic and physical assets?

Learning from a Crisis

A run of nasty viruses and a major
power blackout provide several
lessons we can take to heart.

Politics and Policies with a Capital P

It's an election year; no candidate is
really talking about "IT issues"—but a
new spate of proposed legislation will
impact the CIO's job.

Running IT Like a Business

Research findings and best practices
on everything from finance to staffing
to marketing/communications.

Standards

What are the high stakes battles
and how will the outcome shape
products and services?

Software Quality

The complaints about the overall lack of
quality of major commercial software
are endless. What can and is being done
to make it better?

Technology Fear Factor

Are we stifling innovative products and
services because CIOs are afraid to buy
from small firms and start-ups?

Reality Bites

Many enterprise applications turn into
major disappointments, if not disasters.
Were they over-hyped? Were our
expectations unrealistic? What
separates winners from losers?



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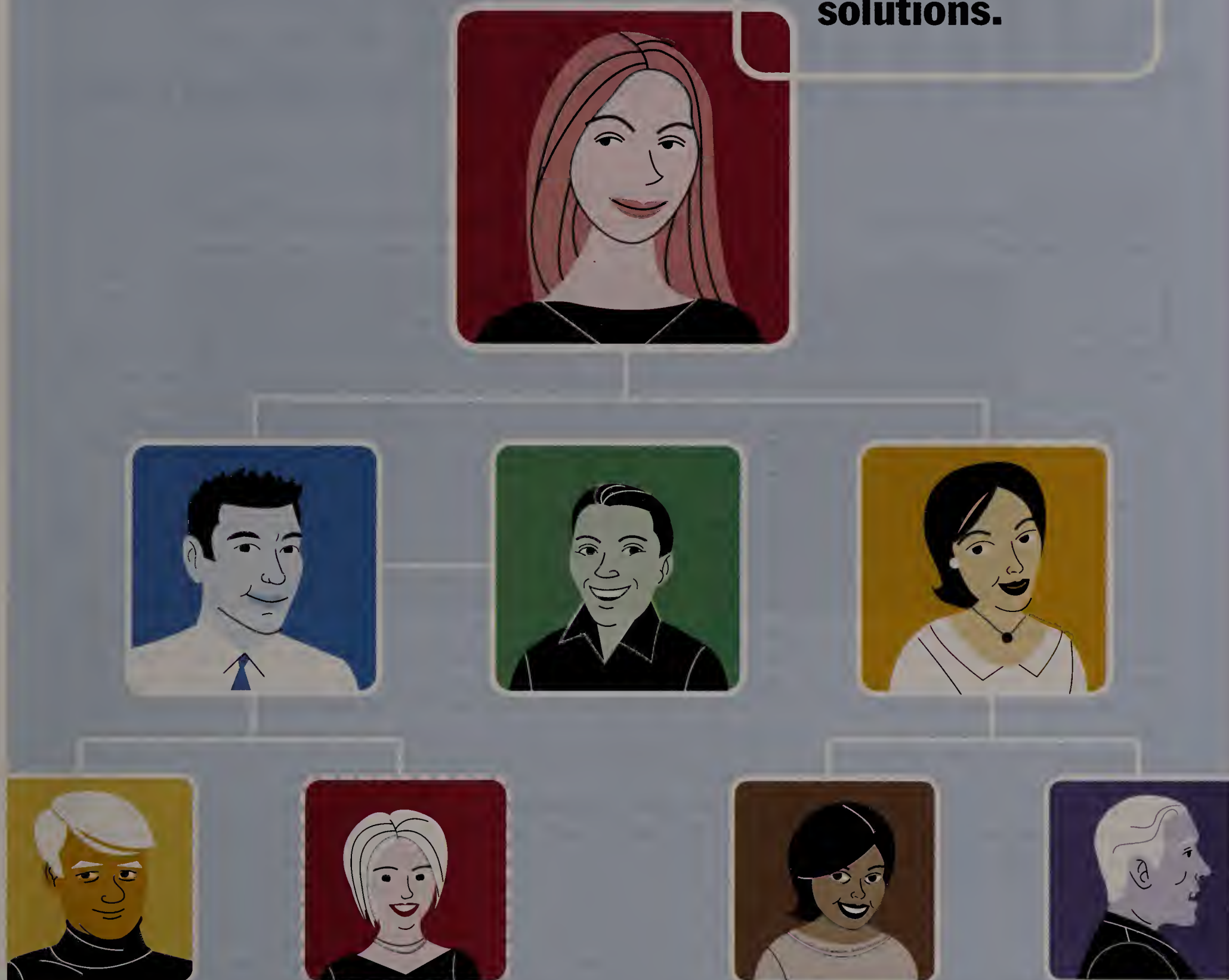
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EXECUTIVE

Summaries

February 1, 2004

COVER STORY

You Sue, You Lose: The High Cost of Litigation

By Scott Berinato | 40

Litigation over software project failures has risen in recent years as the economy slumped. Few court contestants emerge satisfied with the outcome—cases have been messy and costly to prosecute. But many of these conflicts could have been avoided if CIOs and their executive cohorts were better prepared legally for failed projects. Too often, CIOs are not fully involved in the contract, relying on corporate counsel—who lack expertise in the particular risks of software projects. There are several contract elements that can protect a company. One example: Mandate that all applicable contract provisions apply to subcontractors' work too. If intractable disputes do arise, mediation is the most desirable legal alternative. Compared with going to court or arbitration, it is the least antagonistic and the least formal. There are no witnesses or evidence, and most of the time, it's voluntary. Though most often the mediator is an independent third party, a CIO can even act as the mediator, which is what happened at U.S. Can.

"The worst thing in the world is being in litigation when you're right, because you're spending money to get what you're supposed to have anyway."

—CHARLIE TALMADGE, FORMER CEO,
MERCHANTS & BUSINESSMEN'S
MUTUAL INSURANCE

How to Make Your Best Case

By Lauren Gibbons Paul | 56

A STRONG BUSINESS CASE IS CRITICAL for effective IT governance. In fact, at great companies, business cases have emerged as a core competency of the IT department, which offers business case consulting to project sponsors. These experts point to five essential rules for success, including knowing your company's hurdle rate and which other projects are in direct competition. Another is to make sure it's a team effort—with the IT person laying out the alternatives and providing data on features, costs, training and support, the business rep can analyze the alternatives and identify the benefits that the business sponsor will own. Another must: Include soft benefits as well as hard ROI data. Even if they're impossible to quantify, intangibles often make the difference between acceptance and rejection. And no business case today should be without an outline for dealing with and mitigating as many risk factors (including change management and market risks) as possible.

Wireless Finally Connects

By Ben Worthen | 62

RESPONSE TO CIO'S LATEST WIRELESS SURVEY indicates that attitudes toward the technology are returning to levels not seen since the Nasdaq was at more than 5,000. The renewed commitment to wireless as a critical, core technology has been spurred by improvements in three key areas: devices, networks and applications. Devices have gotten smaller, offering combination PDA-phones, color screens and, most important, longer-life batteries. Networks, now able to break data messages into small chunks and deliver those packets over most existing cellular networks, offer improved coverage and lower prices. Bandwidth speeds are expected to reach 160Kbps this year. Applications have made the least progress of the three areas—Web-based apps require constant connections and suffer from the limits of device screens.

Sweet Deals or Bitter Meals?

By Jerry Gregoire and Robert Urwiler | 70

DESPITE THE HEIGHTENED CONCERN over business ethics, a flourishing practice remains in the quid pro quo of customer references when technology vendors provide discounts and preferential treatment to CIOs in return for good reviews. Robert Urwiler, CIO of software company Macromedia, maintains that such arrangements can be beneficial to all parties as long as certain rules are followed. Jerry Gregoire, former CIO of Dell and PepsiCo, disagrees, arguing in his counterpoint that there's never a good reason to exchange references for preferential treatment. While a CIO has no control over how that vendor might treat the next customer, says Gregoire, the CIO will inevitably shoulder a certain amount of the blame if things don't go well, particularly if it's known that the CIO has been compensated for providing the reference.

Hot Seat: Can't We All Just Get Along?

By Stephanie Overby | 83

THE ACCOUNTS PAYABLE DEPARTMENT at Novartis Pharmaceuticals faced a crisis in the summer of 2002—a backlog of overdue bills. The business side blamed an SAP module they felt IT had forced on them; the IT group felt scapegoated for an inefficient payment process. Business managers lobbied to scrap the SAP module and began meeting without IT to come up with a new solution. But CIO Ray Pawlicki headed off a train wreck waiting to happen by calling in leadership consultants who engaged the two parties in a six-month Language of Leadership, a program that included some offbeat segments, but soon cooled antagonisms and got people working together. The result was a joint IT-business proposal to scrap the SAP module, use a best-of-breed solution and speed up bill payments—all while saving Novartis up to \$5 million a year.

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